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JACOB'S LADDER TRAIL

Scenic Byway Development



Pioneer Valley Planning Commission

June 1995

• Design Guidelines • Corridor Management • Land Use Planning



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Jacob's Ladder Trail Design Guidelines

*Hazethorn at
Chester Turnout*



*Ash at Chester
Turnout*



Introduction

Jacob's Ladder Trail is a scenic byway which extends for approximately thirty-five miles through a series of foothills collectively called the Berkshire Hills, in Berkshire, Hampshire and Hampden Counties, Massachusetts. A section of Route 20, this historic byway is unique for its small rural towns - Lee, Becket, Chester, Huntington and Russell - set in a landscape of great natural beauty. The five Jacob's Ladder Trail towns retain many of their historic resources, their old bridges, roads, houses, mills, quarries, cemeteries, churches and town halls. The landscape crossed by the scenic byway is dominated by the nationally designated Wild and Scenic Westfield River, made yet more interesting by Walker Brook and Greenwater Pond, and by wetlands and woodland parks along its route.

Bypassed by much of the 20th century's commercial, industrial and residential development, the five towns along Jacob's Ladder Trail have not enjoyed the economic success and development of many other towns in the region, but this very lack of development has become an advantage as they have retained the look and feel of small New England towns. General stores, small restaurants, town commons, and tree-lined streets of

modest 19th century homes characterize much of the area. The recreational lure of open space, rivers, mountain trails, rural fairs and festivals now offer the five trail towns an opportunity to become a tourist destination, bringing with it welcome economic development. How to control economic development so that it does not destroy the very attraction it celebrates is the issue taken up in these design review guidelines: not to prohibit but to enhance development; to preserve, conserve and grow in an intelligent and measured manner.

Many communities find themselves reacting to a threat of sprawling development, such as super stores, mall complexes or housing subdivisions. Within a short time they must scramble to find a local consensus on what they want their town to look like and how to achieve it. Jacob's Ladder Trail towns are aware of this threat and several have undertaken studies (Chester and Lee) to define their



character, refine their zoning bylaws (Russell, Chester, Becket and Lee) and be prepared to make decisions on appropriate development. These efforts have not come too soon, as tourist-related development has begun making its appearance in Lee at the Massachusetts Turnpike exchange with Route 20, a natural stopping place where amenities are already established for tourists. It is safe to assume that this type of development for tourists will continue.



A Huntington restaurant



Huntington town common



Lee town common



A tree-lined street

Purpose of Design Guidelines

Design guidelines are practical principles to follow in planning for or reviewing the appropriateness of new development. Community planning boards may use guidelines in developing local bylaws or in reviewing site plans. For some communities, guidelines illustrate and provide the rationale for their existing zoning bylaws. In either case, guidelines tell developers what a community considers desirable, what it sees as its assets and suggests ways to accomplish projects without having a negative effect on the assets. Scenic byway guidelines help define roadside character and set out goals for developing, improving and preserving that character. Roadside character may, in fact, shift subtly as the road passes through several towns, so guidelines serve to make these shifts clear and suggest means of maintaining each distinct character. By providing illustrations and written descriptions, design guidelines expand visual expectations to include more solutions, more alternatives and better ways to articulate their benefits to the community at large.



Enclosing ledge



View enclosed on one side





Character of Jacob's Ladder Trail

In defining the character or set of characteristics of a byway it is useful to look at the patterns found in the landscapes along the road, the patterns of historical development, the buildings, cultural landscapes and structures beside the roadway.



Unimpeded vista



Typical curving road

ROADSIDE LANDSCAPE PATTERNS

Jacob's Ladder Trail is a section of Route 20 which extends from Russell to Lee, Massachusetts, through Huntington, Chester and Becket. From Russell through Chester, the Trail follows the valley of the Westfield River and is variously described as the gateway to the Berkshires or the southern hilltowns. A consistent geographic feature is the steeply hilly topography. The road offers a variety of experiences of the terrain: abrupt and enclosing views of ledge where the road cuts through a section of hill; views enclosed on one side and opening up to river or pond on the other; and occasionally unimpeded vistas to distant hills. Characteristic of the road is that it climbs, descends and curves,



Becket Wetlands

offering a varied traveling experience; there are few straight-aways. Although many of the road's curves have been straightened, the original full curves still



Previous roadway now a turnout

*Black Choke
Berry*

exist as turnouts and continue to offer visual variety and a sense of the roadway following the contours of the land, veering next to the river or cutting close to a hill. Woodland vegetation is consistently in sight, varied by wetlands in Becket, a few open fields in Russell and Chester, and residential landscapes in Becket and Lee.

HISTORICAL DEVELOPMENT PATTERNS

Jacob's Ladder Trail has been an east-west route since native Americans, the Woronoake, the Nonotuck and Mohegans laid down paths, traveling to and through the region to hunt, fish, and trap from the Connecticut River Valley on the east and

New York on the west. English settlers consolidated their paths and expanded them as one roadway to travel from Springfield to Pittsfield and Albany for trade, logging, hunting and fishing. After the Revolution the road continued as a stage route from Albany to Pittsfield and Springfield, ultimately extending to Boston, as the Eighth Massachusetts Turnpike. The turnpike became a toll road in 1800 and travelers were numerous enough to support several inns and toll houses along the route.

During the first third of the 19th century villages developed along the roadway and by mid-century early industry was established. Paper mills were established in Russell, Becket and Lee; granite and marble quarries operated in Chester, Becket and Lee. Small scale farming was the economic mainstay, however, of all five towns.



A toll house in Becket



A tavern in Becket



Roadway close to the Westfield River



A toll house in Chester



Chester depot



Steam engine in Chester

Russell, Huntington, Chester and Becket were given an economic boost in the 1840s when the Western Railroad built a section of railway to connect Worcester and Boston to Albany and passed through these towns. Growth of Russell, Huntington, Chester, and Becket as railroad villages increased road traffic as well, as industries, farmers and quarriers brought produce and freight to the rail depots for shipment.

Road travel by wagon was slow; automobiles at the turn of the century were few and far between. So construction in 1905 of an electric trolley line between Westfield and Lee connecting in Huntington, increased travel along the trail

*Honey Locust
in Lee*

considerably. People rode the trolley to work, to school and for recreation; freight was even carried on a special flat bed car. The streetcar companies also heavily promoted the line's use for summer tourism and encouraged tourist travel from Westfield and Springfield to the hilltowns for day trips, picnics and amusement sites.

Tourism in the hilltowns did catch on but not as the streetcar companies envisioned. People increasingly took to cars rather than trolleys for travel. Automobile clubs formed across the state to lobby for better roads and to publicize the best travel routes. In 1910 Route 20 became a state highway, known as the

Great Mountain Crossover connecting the Berkshires with the Connecticut River Valley. A stone cairn made up of stones brought by various automobile clubs was begun at the opening ceremony in 1910 and is still to be seen beside the road in Becket. By 1920 ridership on the trolley had been eclipsed by the car. The rails were taken up, but the patterns of use established in its early years remained.

The road got its name, Jacob's Ladder Trail, in the early years of the 20th century. Originally a small segment of road in Becket was called *Jacob's Ladder* in appreciation of its extremely steep incline, but exactly who coined the phrase and what it meant is told in several different versions. One story, and perhaps the most colorful, is that a farmer named Jacob lived on the road and operated a splendid sinkhole in the middle of the roadway. When his farm duties slackened off, he covered the mud hole with saw-



Stone cairn in Becket

dust to make it appear solid ground, then would charge motorists \$25 each to haul them out with his team. The road was certainly a barrier to early cars and it was skirted by a more gradual road in



Railroad round house in Chester



Huntington center on Route 20

*Lucothue at
Chester Forest*





Crescent Mills, an on-road village

1924. The original *Ladder* is still visible from Route 20, especially when the leaves are down.

Advertising for tourism in the 1920s and the advent of picture postcards encouraged an extension of the name to *Jacob's Ladder Trail* to include the other hilltowns along Route 20. If the number of postcards printed for the route is any indication, it was a mighty popular road. Postcards still turn up in antique stores memorializing tourist cabins, an observation tower, dance spots, gas stations and restaurants along the trail. These tourist attractions were not many in number, but were well-known and well-attended. Then, beginning in the 1960s, the Massa-

chusetts Turnpike siphoned off most of the tourist traffic from the trail. Without access points along the Turnpike to the hilltowns, new tourist-related stores, motels, and gas stations were not constructed, and those which had been built changed little. This pattern adds to the present attraction of the Trail. The five towns have remained relatively intact, rural areas, are generally unspoiled, and the area has retained the

beauty and recreational areas which drew earlier tourists.

From this historical sketch several other development patterns on the roadway and its adjacent towns can be traced. One of the first is the close connection between the road, the river, and the railroad lines; all following the path of least resistance through Russell, Huntington and Chester. At Becket the close proximity between road and river or rail changes, and the road strikes out separately to connect the Westfield River towns directly to Lee on the Housatonic River.

Along Jacob's Ladder Trail, town centers are located on Route 20 or act as connections between the road and the river and railroad. Town centers and villages are directly on Route 20 in Huntington, Russell's Crescent Mills, East Lee and Lee center, when road and river (or brook) coincided. Chester and Russell are connectors where location of the railroad depot and river departed from the roadway. Completely off the main road are Becket Center and Russell's Strathmore Mills village. The location of these two villages was determined by all-important falls in the river, which were exploited for water power and strengthened by presence of the railroad line.



Lee Center, on-road



All town centers and villages, no matter where they are located in relationship to the road, are discreet; none merges with another, as their development has been very limited. The link with water or railroad is still clearly visible in each town: Becket's riverside mill foundations, Huntington's span on both sides of the Westfield River, Russell's rail lines running alongside the river, Chester's preserved depot. Only one town has commercial development of any size: Lee has a functioning downtown with a well-preserved collection of 19th and early 20th century commercial buildings. A modern commercial strip connects it to the only exit from the Massachusetts Turnpike intersecting with Jacob's Ladder Trail.

The age and use of some of the building stock along the roadway presents another pattern. A number of 18th century houses used as taverns remain along Jacob's Ladder Trail in Russell, Chester, Becket and Lee. In Russell is a late 19th century hotel converted to an apartment building, and there are tourist stops in Chester, Becket and Lee dating from the 1920s and 30s. The relative absence of contemporary convenience stores, standard roadside gas stations and chain restaurants in all but the final section of Lee is another significant pattern.



Massachusetts Turnpike Interchange at Lee

second homes which encircle lakes and ponds and only seasonally inflate the town's population. Consequently, the pattern of distinct towns with compact development, (rather than town centers linked by roadside sprawl) has been retained. Lacking the string of identical franchises and malls that makes one commercial strip indistinguishable from another, Jacob's Ladder Trail scenic byway and its adjacent towns can retain what makes them unique and yet attract development as tourism and the economy grow.



Russell center, just off Rt. 20

The character of each of these towns is based on its geography and history, and each is distinct. To a large extent the rolling topography has limited growth. Steep slopes and stony soil are congenial neither to roadside development nor to industry. Without extensive roadside commercial development or high-paying industrial jobs, there is little population pressure for housing developments. Many of Becket's developments are

Oak at Huntington
'Turnout

Design Review Guidelines

Elements of new construction and alterations which may have an impact on the scenic byway should be considered during the process of design review. These elements are *site design, landscaping, architecture, signs, lighting, and parking*. A discussion of standards to consider for these elements during design review follows.

opment should be carefully preserved in the proposed work or whether it should incorporate improvements to the roadway's scenic value. Because the landscapes vary from rural areas to villages, suggested designs also vary from guidelines appropriate to the woodland corridor and those appropriate to the village setting.

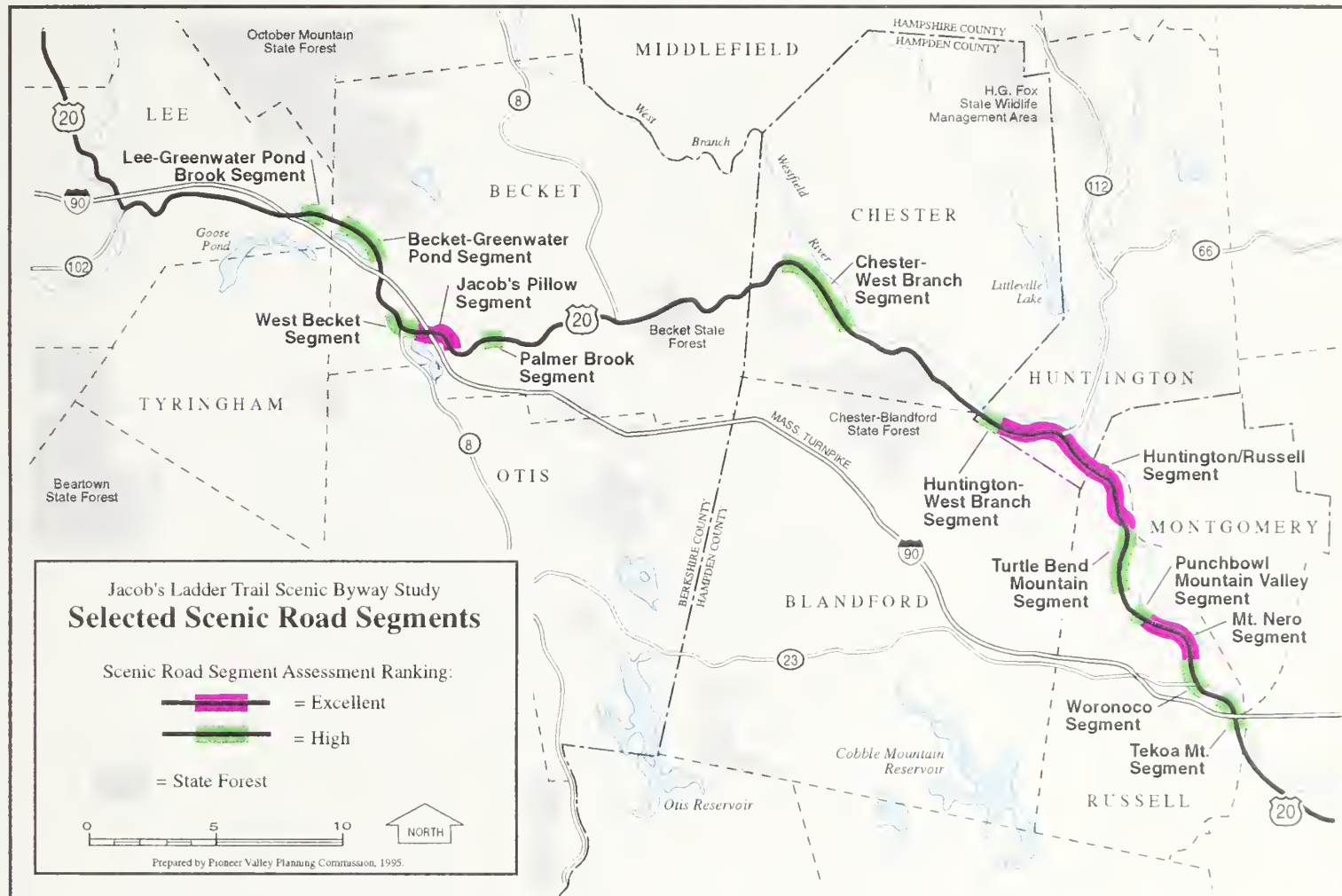
SITE DESIGN

The Jacob's Ladder Trail scenic byway is characterized by a series of significant landscape features which, seen from the road, cumulatively present views of outstanding scenic beauty. Between Russell and Lee, these features have been identified and evaluated in a landscape inventory, which awards relative scenic value rankings of "excellent", and "high" to segments of the road. The undesignated segments are of moderate scenic value. The accompanying inventory and map of the ranked scenic segments will serve to identify highly rated areas which need to be protected as is, and those areas for which continuing improvements are recommended. One of the first considerations then to be made in a site review is whether the roadway adjacent to the proposed devel-

*Phragmites in
Becket*



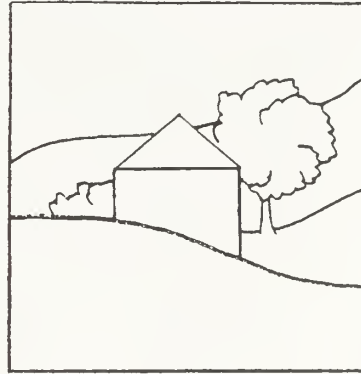




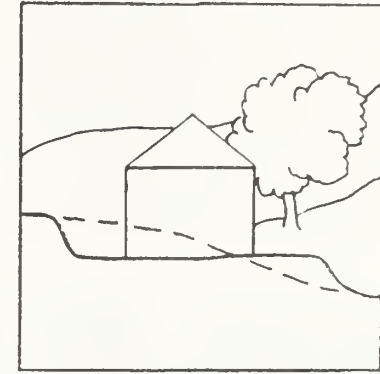
SITE DESIGN FOR WOODLAND AND RURAL AREAS

How will the project affect near, middle and distant views along the roadway? In drawing up a site plan, or in evaluating the impacts of a development on the roadway, many different elements, both of the immediate site and the surrounding area should be considered. Some of these elements are:

topography	hills and valleys rock formations - ledges and rocky outcroppings
landscape features	woodlands, wetlands and open fields
water bodies	lakes, ponds, streams, brooks and rivers
man-made features	stone walls, buildings (including outbuildings like barns and carriage houses) burial grounds, markers, bridges, road-related elements such as turnouts and retain ing walls, orchards, commons and parks

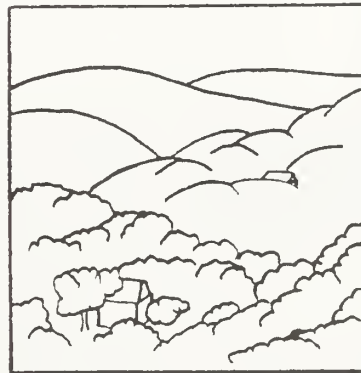


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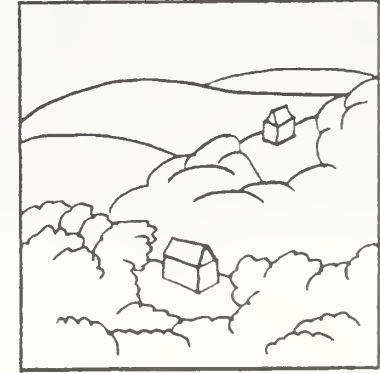


NOT THIS

RESPECT EXISTING TOPOGRAPHY



THIS



NOT THIS

BUILD BELOW RIDGELINES

*Queen Anne's Lace
in Russell*

Protecting these features on any site and its surroundings means making the least impact possible on them as viewed from the road. Preservation of natural beauty and scenic character is a goal of the scenic byway design review process. New development should take into consideration the overall value of a

particular site within the context of Jacob's Ladder Trail scenic byway. The scenic landscape inventory prepared for the Corridor Management Plan describes the assets of the roadway and its adjoining landscape. This inventory can be used as a reference to identify the principal character of a proposed site.



House sited on rolling lot



Contemporary home retains stone wall

GUIDELINES

Every effort should be made to retain as many of the landscape contours and historic features as possible. Single-family home builders should be encouraged to respect the surrounding landscape on their building site by placing buildings to fit within the existing contours of the site rather than leveling a lot or excavating into a hillside.

Existing stone walls should remain intact.

Placing buildings close and parallel to the roadway should be avoided in rural areas of the trail.

Groups of buildings and large commercial buildings along the undeveloped road segments should be situated at an angle to the road to reduce the wall area visible from the road and clustered so as to minimize blocking views of landscape features.

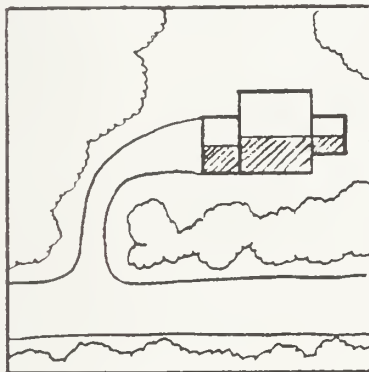
Buildings should be sited so as to maintain intact the ridge lines of hills and ledges. By placing them below the ridge line and ledge top, designers will not interrupt the natural tree and rock profile which is important for maintaining the appearance of the trail. Minimizing the clearing made for a building on a hillside is also recommended, so that bare spots do not mar the view.



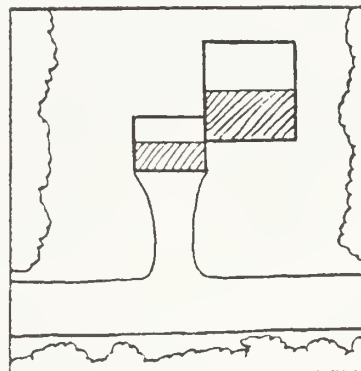
Maintaining the existing natural vegetation between the road and new buildings helps to buffer the impact of new buildings on the roadway. Placing buildings behind hills can also provide at least partial buffering. This practice has already been established in Becket for several subdivisions whose buildings are not visible from the road.

Where possible, driveways should be shared, so as to minimize the number of curb cuts on Route 20. Constructing a curved or angled driveway will improve screening of the building from the road and provide privacy.

Re-establishment of the corridor of vegetation which was removed in the past is recommended.



THIS



NOT THIS

USE CURVED OR ANGLED DRIVEWAYS



SITE DESIGN IN TOWN OR VILLAGE AREAS

GUIDELINES

Extending a town center along the byway in a sprawling fashion should be avoided. Building on vacant lots in town centers will concentrate and maintain the discreet boundaries of each community and will concentrate available services and stores, making it easier to walk and bicycle.

Siting buildings on lots in town and village centers should follow the pattern of existing construction by copying the setbacks from the road of adjacent buildings. Although in a

town center such as Russell, building setback along Main Street may not be entirely consistent, new construction should follow the majority of the buildings. Only outbuildings should be placed further back on the lots.

The practice of maintaining a prominent row of trees on each side of the street can give a more orderly appearance to irregular setbacks.

In town, the closer spacing between buildings should be retained and followed, as well as the uniform angle of the buildings' placement on the roadway.

As space for expansion in town centers becomes less available, zoning to permit rear-lot development should be considered to encourage the continued concentration of the town and village pattern and prevent sprawl along the byway.

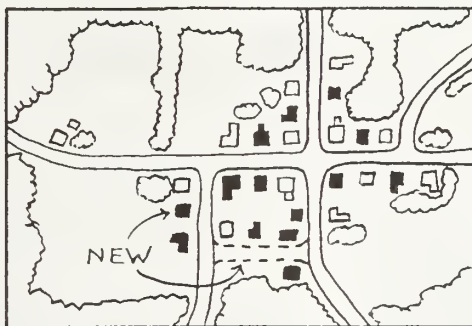


Consistent setback maintained in Chester

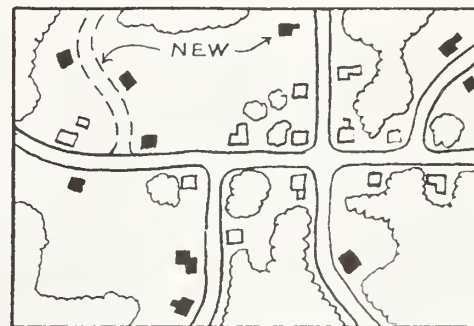


An angled driveway improves screening

*Yellow Birch in
Becket*

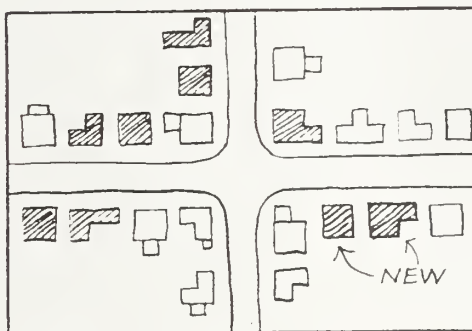


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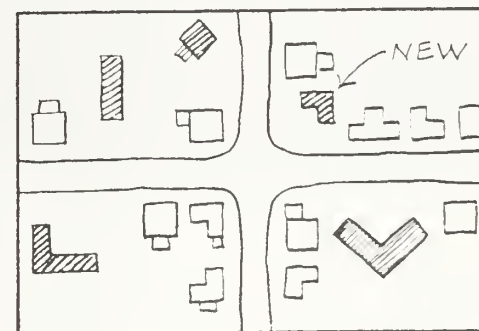


NOT THIS

KEEP VILLAGE CENTERS COMPACT



THIS



NOT THIS

USE CONSISTENT SPACING AND SETBACKS IN VILLAGE CENTERS

**SITE DESIGN BY THE
MASSACHUSETTS HIGHWAY
DEPARTMENT IN OR OUT OF TOWN**



Trees improve appearance of irregular setbacks

GUIDELINES

Highway Department changes to the byway should take into account the scenic landscape inventory of the Corridor Management Plan and work to maintain the scenic features listed above. The most highly ranked areas of the scenic byway landscape inventory should receive priority for attention. For instance, historic turn-outs which were part of the original Route 20 roadway should be retained and maintained.

The roadway should continue to conform to the natural terrain and any work which would result in straightening, widening or leveling the roadway should be avoided. If any grading is undertaken for erosion control, it should maintain the rolling topography and natural vegetation which characterizes the roadside.

Widening of the shoulders of the road should be avoided, to keep the road intimate and scenic and to retain as much natural vegetation as possible.

Small, directional, tourist attraction signs should be permitted in the state right-of-way.



LANDSCAPING

Vegetation along the trail is typical of the oak-maple hardwood community and spruce-pine softwood community common in hardiness zone 5. Soil quality varies along the trail with a rocky, dry



Landscaping at Chester State Forest

soil dominating. Pockets of wetland species appear in Becket and Lee. These areas are inhabited by red maple, red-osier dogwood, and reedy grasses like phragmites.

When the streetcar and utilities were added in to the roadway 1905-1908, railside landscaping meant clearing, building stone embankments and keeping the roadside open. Building construction in the early 20th century was so limited that roadside landscape enhancements were apparently unnecessary. Removal of trees and ledge just exposed the next layer of trees and ledge. Today, landscaping is often driven by similar pragmatism and concern for safety. Trees are pruned to avoid utilities; the opportunity for a road canopy, or more accurately, in the case of a road as wide as Route 20, for a tree *allee*, is compromised. Landscaping the roadside is still not undertaken to any extent. Turnouts have been cleared for ease of maintenance by mowers and plows, for visibility and safety for cars and bikes, rather than to attract users. One excep-



One of Becket's subdivision signs

tion is the roadside parking area for the Chester State Park. The space has a row of pine trees along the road which provide enclosure for the parking zone. A gap in the pines announces the entrance to the park, yet maintains the theme of the natural wooded roadside.

In the towns and settled areas, landscaping varies according to the era of construction. In the 19th and early 20th century an agricultural landscaping pattern developed which stressed ease of farming access to and from the road. The utilitarian ideal meant that little planting was needed aside from wind screening.



From the 1920s through the 1960s landscaping plans offered maximum visibility from the road. Lots were cleared and buildings set further back from the road; lawns and foundation plantings were common and fences were infrequently used. A modification of this landscaping pattern came into use in the 1960s. In Becket, Huntington and Lee residential buildings were often sited in a suburban manner: set back with deep lawns and few trees. Outbuildings were no longer consistently placed behind the principal building. At least one trailer park was set close to the road without the benefit of landscaping. These buildings and

structures often do not respect a uniform setback and they appear exposed and starkly set on their lots. Because this practice breaks continuity, it is an example of what should be avoided. From the 1970s, again in Becket and Lee, along Route 20, siting and landscaping were improved by the quest for privacy. Houses were more often set back from the road and screened by trees. Serpentine driveways were designed to reduce the building's visibility from the road and subdivisions were built behind hills and entered through a gateway announced by a sign.

GUIDELINES

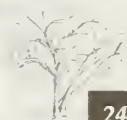
Outside town or village centers, preserving the tree corridor is recommended. Locating new buildings directly on the roadway should be avoided, as doing so may block a view of open space such as a farm field, or may require cutting down trees at the roadside and interrupting the vegetation corridor. Vegetation should not be clear cut between the building and the roadway in order to create a suburban open lawn, an effect which is incompatible with the established rural atmosphere along the byway. Rather, in wooded areas, retaining or establishing a twenty foot wide natural buffer of vegetation to screen buildings from the road is recommended. A twenty foot wide buffer will maintain the woodland corridor which characterizes much of the trail.

Commercial developments should have landscaping plans which provide screening for all outbuildings and support structures with evergreen trees and bushes at least 5' in height.

Landscaping plans for commercial developments should require maintenance and replacement when necessary.



Twenty foot tree buffer retained



For both environmental and aesthetic reasons, landscaping plans should place the highest priority on preservation of existing vegetation. Plans for new landscaping should emphasize plants and trees native to the area.

To avoid a formal appearance to the landscape more suitable to urban areas, natural borders and landscape edges should be retained to soften the effect of new construction. For instance, retaining hedgerows along stone walls or wooded back lots is recommended.

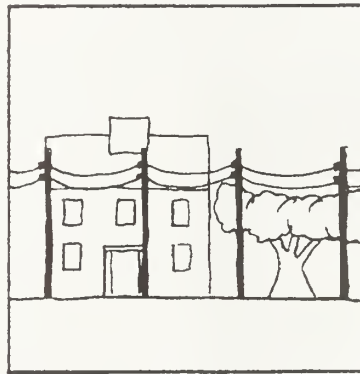
District one of the Massachusetts Highway Department should be provided with a landscape plan and planting list. These will

cover pruning and cleaning views to the water, improving the appearance of unadorned turnouts with low-maintenance planting, maintaining the highly scenic areas, and improving the ordinary stretches of landscaping.

Burying utility lines should be the objective for all new commercial and residential subdivision development along the trail and should be encouraged for existing lines at the time road work is being performed, even if undertaken in an incremental fashion. Where burying lines is not feasible, they should be strung behind buildings or far enough behind roadside vegetation that roadside trees can be allowed to develop a canopy and natural profile.



THIS



NOT THIS

BURY UTILITY LINES



ARCHITECTURE

Traditional architectural forms have been documented for Jacob's Ladder Trail through the Cultural Resource Inventory as part of the Corridor Management Plan. It is these historic buildings and their stylistic details which make up so much of the character of the trail - the visual interest provided by worn clapboards or shingle patterns, multi-paned windows with old glass, turned railings and balusters. A small number of 18th century Georgian and Federal style houses, among them several which



Federal



Georgian

served as inns or taverns, are located on the trail, but the majority of historical buildings date from after 1800 when the Eighth Massachusetts Turnpike was built. Huntington, Chester, and Becket have particularly fine examples of the Federal style on the trail. Russell has the largest number of Greek Revival houses dating from 1840s-1850s, most of which are stylistically modest. Huntington and East Lee have many well-preserved examples of the Greek Revival style; Chester has examples of both houses and churches which deserve note. Becket's finest examples are off Route 20 on Route





Greek Revival



Gothic Revival

8 north towards Becket Center. A Gothic Revival cottage of the 1840s-50s is one of Becket's outstanding buildings. Examples of the trail's Italianate style buildings of the 1850s and 60s are principally found in churches in several of the towns and commercial buildings in downtown Lee.



Italianate

Arboretum at
Huntington Cemetery



Building construction slowed appreciably after the Civil War along the road. The Mansard or French Second Empire style appears several times in Lee, but is almost non-existent elsewhere, and there is a proportionally small number of Queen Anne and Colonial Revival style buildings from the 1870s through 1900. When construction did take place it was generally small in scale and in vernacular, local builder's versions of the current styles. Typical are gable roof houses with porches on turned supports, trim along barge boards, modest shingle patterns and occasional bay windows. There are a few exceptionally fine Queen Anne style buildings in Lee and Chester. The Colonial



Stick Style



French Second Empire



Queen Anne

Revival style is well represented by a general store and school in Chester and a former hotel in Russell.

The Craftsman style and bungalows of the 1910s and 20s are found in Russell center and Lee, followed by Neo-colonial, cape-style houses in Becket and Lee dating from the 1930s and 40s.



Colonial Revival



Colonial Revival school



A residential scale church



All of these historic styles share similar fundamentals or design principles: *scale, rhythm of the openings, massing and materials choice*. By recognizing these fundamentals, new construction can harmonize with existing buildings yet maintain its contemporary identity.

Scale is the size of a building in its setting and in its relation to a human being. Traditional New England and hilltown architecture is human scale; building types are consistently at a residential scale so that a church, meeting hall or store are close in size to a house. Along Jacob's Ladder Trail traditional building height does not go beyond two and a half stories (25 feet) in residential buildings and three stories (35 feet) for commercial buildings. Doors, windows, and porches relate directly to the size of a human, which is the scale against which new construction should be measured.

Massing is concerned with a building's shape and the relationship of its parts. Its height, width, depth, the placement of its different elements (wings, ells and towers), its roof shape and pitch make up its massing. Hilltown buildings are relatively simply massed - towers, oriels, transverse gables, extensive dormers, cupolas and bays are not widely used.

Rather, forms are uncomplicated and compact, generally topped by gable roofs. A main building section often has appended to it one or more ell extensions at a somewhat lower height.

The *rhythm of the openings* or the ratio and arrangement of voids to solids on a building's exterior refers to the size of windows and doors in relation to the solid surface. Traditional hilltown buildings generally have symmetrical, evenly spaced openings which make up a relatively fixed percentage of a facade: between 15 and 25% for residential buildings built after the mid-nineteenth century, nearly 100% of the street facade of the ground floor up to 25% of the floors above.

Materials consists primarily of wood clapboards and shingles with less frequent use of brick or stone. Roofs are asphalt shingle, slate and occasionally tin. Foundations are generally stone or brick, with plant-screened concrete for more recent construction.

Paint colors in the hilltowns have followed those practices used throughout Massachusetts. Georgian buildings were either unpainted or painted a dark red or ochre. Federal colors were pastel shades

of blue, green and yellow; white was in limited use. Greek Revival buildings were mostly white or light shades of beige or gray. Earth tones were introduced with the Gothic Revival and Italianate styles; beige, gray, olive, dark brown, fawn, medium red, to suggest the stone of the buildings which inspired the styles. With the Queen Anne style, colors multiplied to add vibrancy to the exterior and three-color schemes were often applied within the general framework of a dark body color with light trim or light body color with dark trim. With the Colonial Revival style, color choices returned to the lighter palette of the Federal and Greek Revival periods, and although there might be a three-color scheme, contrast among the colors became more subtle and sedate. A chart of colors appropriate for the different styles of historic buildings and a more detailed discussion of how colors were used is included in the Appendix.



GUIDELINES

It is recommended that new buildings or additions to existing buildings try to fit in to the existing architectural environment of scale, materials and design elements. Reinterpreting rather than mimicking traditional features is the best way to respect traditional architecture in new construction. Traditional architectural features which can be used in a manner consistent with contemporary styles, such as porches, bays, dormers, and porticoes are encouraged. Introduction of historical styles from outside the region are usually to be avoided, i.e., adobe-like or Tudor stucco and half-timbered buildings do not fit in to the existing architectural environment.

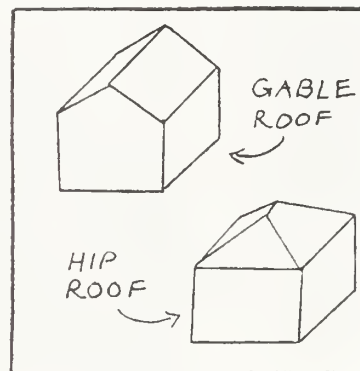
Rehabilitation and reuse of existing buildings is recommended. Placing new uses in older, vacant or under-utilized buildings is a means of keeping the historic fabric of a town and is a practice with long tradition in the hilltowns.

Rather than constructing larger scale buildings, expansions to existing buildings should consist of residential scale ell's, wings and compact additions.

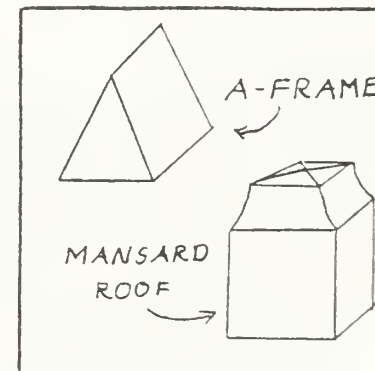
Roofs should follow precedent in the community with respect to form as well as height. Along Jacob's Ladder Trail, gable and hipped roofs are traditional residential forms and should be encouraged for new construction and additions. Flat roofs are common on commercial buildings in Lee, and on a few in Huntington, and new commercial construction adjacent to these blocks should meet them in height and in use of a flat roof. In all the remaining towns residential and commercial buildings are mingled in lightly settled areas. Thus, new construction should follow the adjacent roof forms of these centers; mansard look-alikes, flat roofs, or A-frames on buildings would not be compatible.

In town, buildings should be limited to two and a half stories in height in a residential neighborhood and three stories for a commercial neighborhood where three-story buildings already exist. Out of town, new construction should not go above residential height of 2 1/2 stories. A useful rule of thumb used by some communities is that new construction height should come within 10% of the average height of historic buildings in the neighborhood.

Scale is the perceived size of a building in relation to a human being. Building scale in the five towns is small and new construction should keep the established, close relationship



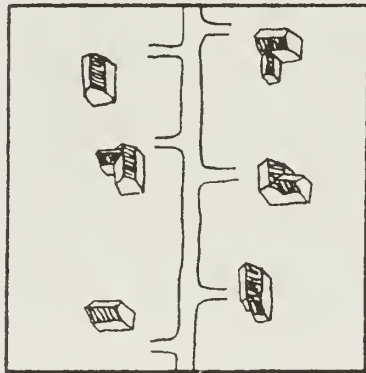
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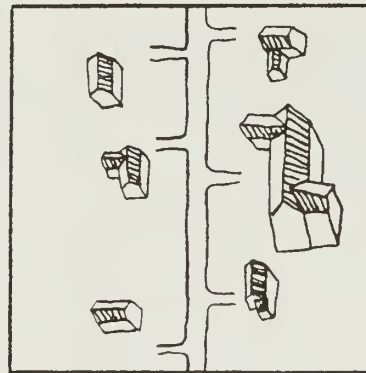
USE GABLE AND HIP ROOFS



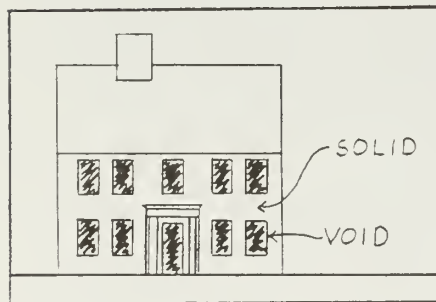


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KEEP BUILDING HEIGHTS AND SCALE CONSISTENT
WITH HISTORIC MODELS

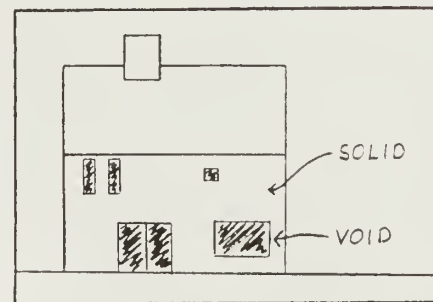


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USE TRADITIONAL WINDOW STYLES AND SPACING



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between the building and human size. Similarly, the ratio of the buildings' voids (windows, doors) to solids (walls) should follow those of the surrounding buildings. The relationship between the area of wall surface and the openings into a building has a strong tradition in the hilltowns, a pattern established in the early 18th century. Maintaining that relationship will avoid largely blank facades (too much wall), or those of expansive glass (too much void).

For new construction and alterations, the use of traditional building materials is advised: wood or brick for the body of the building, stone for foundations. Roofs of asphalt shingles or slate or traditionally painted tin are consistent with the historical buildings found along the corridor and should be used. The use of veneers, either brick or wood, should be discouraged.

Paint color decisions for existing buildings should be based on historic appropriateness, the owner's preference, and the building's relation to its neighbors. Paint colors are reversible, and there are no hard and fast rules which must be followed for all but the most fastidious restorations. The chart of historically appropriate color schemes in the Appendix is to suggest, not dictate, color choices, and not all colors need come from the



chart. An unusual accent color, if used subtly, can look wonderful in a larger scheme of traditional colors.

Paint or stain colors for new construction should be chosen from among the range of traditional colors discussed in the Appendix, avoiding inappropriate, high-intensity colors.

Natural materials, such as brick or stone, should retain their original colors. Painting historic masonry should be avoided.

Covering wood or brick buildings with vinyl or aluminum siding is not recommended. Architectural detail and the warmth of

traditional building materials are lost with these products; dirt and damage to the siding materials are highly visible, and deterioration over the long run to the materials beneath the siding has been demonstrated. Alterations to existing buildings should strive to retain and restore architectural details such as balustrades, pilasters, cornices, door surrounds, sidelights, and transoms.

Doors and windows should be retained in their original positions, materials and configurations. For example, insertion of a bay window on the street facade of a traditional building should be avoided. Preferable is to place a non-traditional window on a

secondary facade where it is not visible from the street, repairing rather than replacing wooden windows is recommended. To improve energy efficiency, the use of interior or exterior storm windows is acceptable. Changing window type and inserting snap-in muntins is not recommended as the profile and light reflection of the historic muntins and glass are lost.

Additions to an existing building should be compatible with the original and should use consistent scale, height and wall-to-opening ratio. Additions should be distinguishable from the original building, yet be compatible with it using similar materials, colors, textures and details.



Rehabilitation and reuse of an existing building in Chester



19th c. factory with incremental additions

Dark colored mechanical equipment should be placed out of direct view of the roadway, at the rear of buildings or screened. Satellite dishes, air conditioning units, solar panels, and television antennae should be placed where they will not detract from the building or view. Roof top mechanical units should be screened with railings.

The Highway Department should avoid bridge replacements or alterations with high railings which block water views or views into the distance. Enlarging the scale of bridges and constructing them of visually glaring materials should also be avoided.

Installing new structures made of materials which do not blend into the landscape, i.e., steel rails, steel retaining walls, metal cable, concrete Jersey barriers, should be avoided. As retaining walls and guard rails require replacement, they should be replaced with more aesthetically suitable examples. Recommended are materials which blend into the existing landscape such as intentionally corroding steel rails, low luster painted steel, or materials which perpetuate historically established features such as wood, stone, stone-faced concrete.

Culverts should not extend beyond the slope of the roadside, and if visible they should be stone-faced.



Commercial building with rear ell extensions



Maintaining decorative details

"Musselwood"
European Hornbeam



Traditional hilltown commercial scale



Retaining walls with potential for improvement

SIGNS

Signage along the corridor has traditionally been discreet. Except at Lee's commercial strip, billboards do not exist. Signs for home-based commercial ventures are small scale, unlit and placed back from the roadway. In order to maintain the rural, unspoiled aspect of the scenic byway communities, it is important to continue this practice.



Indirectly lit sign

GUIDELINES

New signs should be placed so they do not silhouette against the sky or interrupt a distant view. Rather they should be placed against a backdrop of vegetation or building so as to blend with the surroundings.

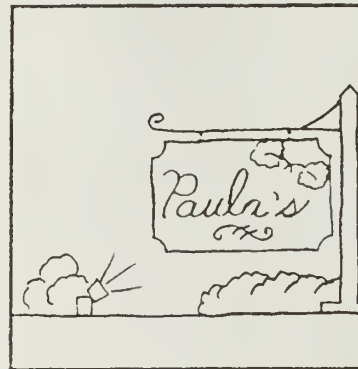
Limits to the number of signs on a building should be strictly followed. Too many signs make visual clutter. One or two clear but discreet signs will attract sustained interest while multiple signs will be ignored.

New signs should be placed on the building itself or perpendicular to it. Signs on

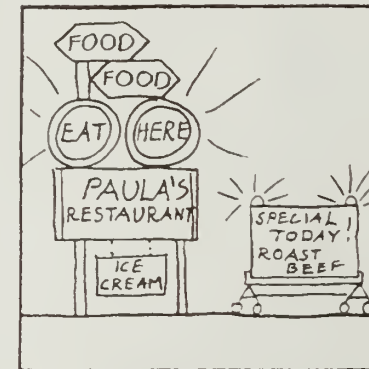
historic commercial buildings have traditionally been placed in the area between the first and second stories, which was established as a sign band. This practice should be retained. Signs hung from the building should be small scale and located above the first story. No signs should project above the roof or parapet.

Billboards should be prohibited.

As with buildings and structures along the roadway, signs and their supports should be constructed to blend into the landscape in color and materials. Signs of wood, brick or stone are appropriate natural materials. No reflective backs should be used. Plantings to soften the effect of signs are recommended.



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DISCREET SIGNS WORK BEST

Free-standing signs should be set back from the roadside and buffered with plantings.

Lighting should be exterior to the sign and indirect; never interior, direct or flashing.

Commercial developments should not have signs on the roadway. Instead, signage should be mounted on the buildings themselves. In cases where the buildings are not visible from the road, an integrated group or cluster of signs softened by landscaping is recommended.



Traditional, discreet signs



Sign well placed against landscape



Exemplary wood sign



Sign with rural design



LIGHTING

For outdoor lighting the importance of nighttime safety must be balanced against lighting pollution and energy consumption. Currently, the rural aspect of Jacob's Ladder Trail is sustained by very restrained, if any, outdoor lighting. At night rural sections of the roadway are either moonlit or dark. Towns have low-level street lights except for the Lee commercial strip.

GUIDELINES

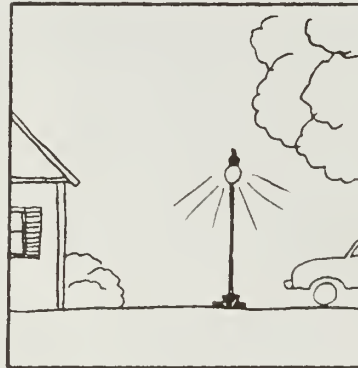
No lighting should spill over on the roadway or on an adjacent property.

Outdoor lighting poles should not exceed 15 feet in height when they are located in or adjacent to residential areas or where there are scenic vistas. In areas of no residential use or where views do not exist, lights should not be mounted above 20 feet.

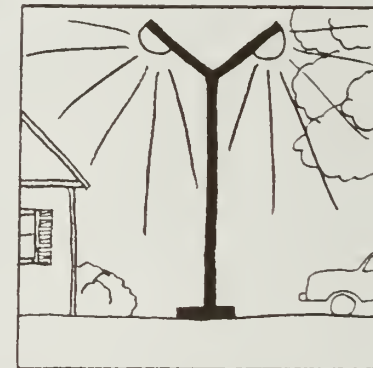
The intensity of the light fixtures in a parking lot should not exceed 250 watts. A parking lot fixture should have a light cut off below 90 degrees and its beam should be

cut off at 75 degrees. Building-mounted lighting fixtures should have a 45 degree light cut off. Lighting fixtures themselves should be compatible with the rural setting in which they are installed and be made of materials which blend into their setting.

Parking lots should avoid tall light fixtures which cast shadows over trees and create unsafe areas in the lot. Rather, lower, more frequent fixtures should be used.



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USE RESTRAINED LIGHTING

PARKING

Fortunately, the Jacob's Ladder Trail towns have so far been able to make do with their on-street parking except for Lee which has some on-site parking adjacent to buildings on its commercial strip. Demand for parking will increase in all the towns though, and it can be expected to set up a competition between convenience and appearance. These guidelines for minimizing the negative effect of providing parking spaces off the main streets address this concern.

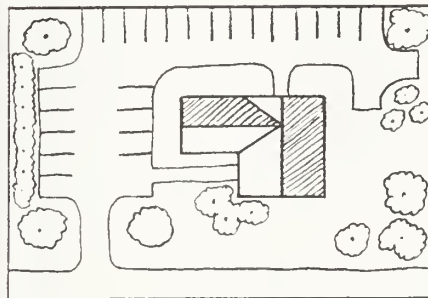


On-street parking

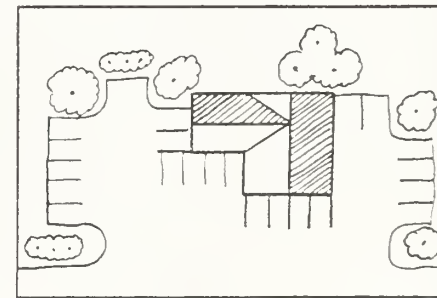
GUIDELINES

Parking lots should be provided at the side or behind new commercial and institutional buildings, rather than immediately in front of them. Lots should be screened from street view by vegetation, and for the more extensive lots, landscaping between parking rows should be installed to avoid the asphalt desert look.

Parking lots need not always, or exclusively, be surfaced with tarmac. Grass or grass and gravel combinations can be much more consistent with the rural setting along the byway.



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PUT PARKING TO SIDE AND REAR

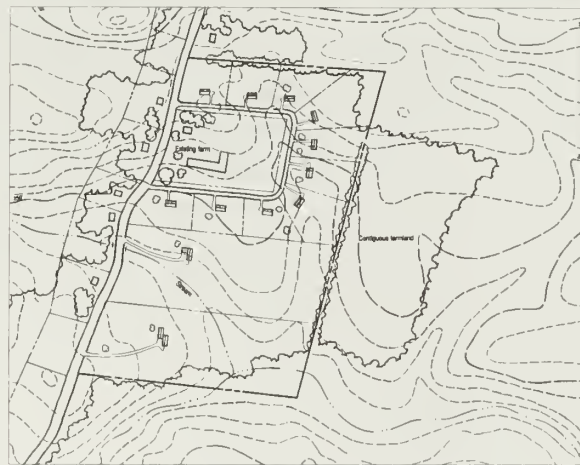


Alternatives to Standard Residential and Commercial Development

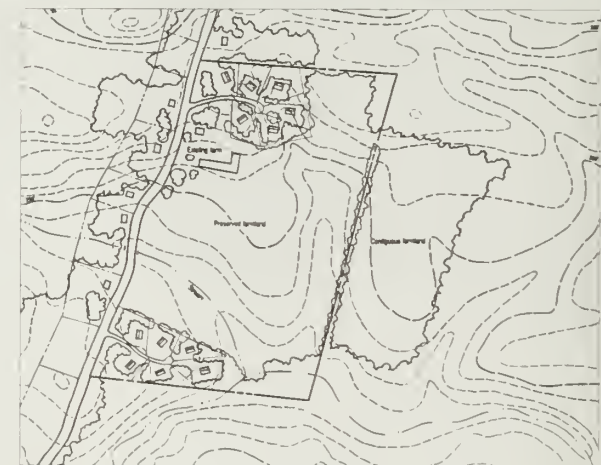
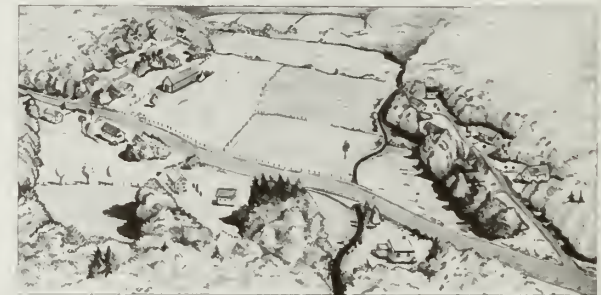
Construction of a residential subdivision, construction of a commercial mall, and conversion of residential buildings to commercial uses are three types of development likely to occur on Jacob's Ladder Trail. Negative effects on the scenic and historic areas of the byway which could be brought about by any one of these types of development can be minimized by applying the recommendations set out earlier in the guidelines of this text. Visualizing the cumulative impact of a standard development is improved when it can be contrasted with the same development following consistent, thoughtful guidelines. Three hypothetical developments are presented here to illustrate what can be achieved through the review process.

RESIDENTIAL SUBDIVISION DEVELOPMENT

A subdivision development on former farmland which follows standard subdivision zoning bylaws often results in loss of the rural character of the open space and agricultural land that it occupies. In these illustrations, two large estate lots have been carved out of a former field, blocking the original farmhouse view to the stream, and ten new houses, each on its own lot and carefully maintaining one hundred and forty feet of frontage and reached by an overly wide subdivision road are laid out in the back acreage. Only one lot adjacent to the barn deviates from a standard grid. As the topographical site plan shows, the farm has been swallowed up in subdivision lots, permanently changing its historical appearance.



Traditional residential subdivision on farmland



Creative development on farmland

The same farm developed to preserve fifty percent of the open agricultural land uses common driveways, avoids the grid imposed by the one hundred and fifty foot frontage requirement, and screens the housing from the roadway. Lots are reduced in size and are varied in both

size and configuration. This plan allows the same number of new houses to be built, yet retains the bulk of the land in agricultural use.

COMMERCIAL HIGHWAY DEVELOPMENT

Standard commercial development can seriously affect the rural character of a highway corridor. In the first illustrations, a mini mall plus four single commercial properties have been constructed with parking directly in front of the stores; landscaping is at a token level.

The creative alternative to this commercial development preserves the farmland, open space rural character of the highway corridor. The scheme uses the entire lot for development, not just frontage. It limits curb cuts and groups the commercial enterprises, sets them back from the roadway and consolidates the parking within the building complex. A buffer of trees and landscaping screens the buildings and parking from the road, leaving the farmland available for cultivation.



Traditional commercial highway development



Commercial development with performance standards

CONVERSION OF A RESIDENCE TO COMMERCIAL USE

Commercial developments often make use of existing buildings converting them to retail use. As the first illustration makes clear, a house can be buried beneath conventional sales structures such as a glass enclosed porch. For ease of maintenance the house is vinyl sided. Parking is placed in front of the building and signage is calculated to attract notice of passersby, but the original character of the house is obscured.

In the second illustration the same house has been rehabilitated for reuse as a retail shop. The exterior clapboards, original door and windows have been restored. Parking is directed to the rear of the property and signage has been erected against a wooden backdrop to attract attention but not detract significantly from the building's appearance. The result is a more attractive building inviting customers, at the same time it preserves the dignity of the original Greek Revival house.



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Appendix

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Suggested Paint Colors for Historic Buildings on Jacob's Ladder Trail*

* Adapted from Fannin/Lehner *Appropriate Colors for Period Houses in Massachusetts*.

Note: Any combination of base, trim and door colors may be used for all the styles listed.

	<i>Base Colors</i>	<i>Trim Colors</i>	<i>Door Colors</i>
Colonial	Natural	Same as base	Dark brown
Georgian 1700-1776	Spanish brown (dark, dull red) Indian red (verging to scarlet) Yellow ochre	White	Black/green (Prussian (dark blue/green) Dark gray Dark red Green
Federal 1780-1830	Brick Off-white Pale yellow Ochered white Soft beige Pale green Medium gray Medium blue	White Buff Medium blue Pale yellow white	Black Natural Brown Red
Greek Revival 1830-1850	White Buff Pale yellow Green/gray Blue/gray Pale gray Gray stain	Olive green Gray/blue Dark bottle green Green/black Buff White Black	Dark green Medium blue Black

Note: Dark body with light trim or light body with dark trim of the same color

	<i>Base Colors</i>	<i>Trim Colors</i>	<i>Door Colors</i>
Italianate 1850-1870	Pale beige Golden sand Golden brown Olive Light gray Deep gray Gray stain Yellow ochre Blue gray Dark Brown Medium red Fawn Buff	Ivory Lighter sand Darker brown Lighter olive Dark gray Light gray Lighter stain Dark green Medium brownstone Old gold	Black Natural Burgundy Brown Sash: reddish brown Shutter: green
Gothic Revival 1850-1870	Shades of gray Drab or fawn Sage Straw / sand Chocolate Buff Brick pink Mustard	Darker than base color when light Lighter than base color when dark Gray Dark green/brown	Unpainted varnished wood Blue / gray Burgundy Brown Oak
Mansard or Second Empire 1855-1885	Pale olive Olive Rose Peach Golden sand stain Tan / Brown Straw Light yellow Light brown	Ivory Tan Pale rose Pale peach Ivory Bittersweet Cream White Medium brown	Olive Oak Dark green Brown

Note: Dark body with light trim or light body with dark trim, color combinations suggested below

	<i>Base Colors</i>	<i>Trim Colors</i>	<i>Door Colors</i>
Queen Anne 1875-1905	Light olive Olive Green gold stain Dark Olive Sorrel Brown, 1sr floor Deep rose 2nd floor Dark tan or taupe Antique Brass stain Curry stain Pumpkin Deep rose	Dark olive, dark red accent trim Tan, dark olive accent trim Yellow, dark olive accent trim, or Terra cotta trim, dark salmon Rose, brown accent trim Tan, amber Rose gable Beige trim Peach Pumpkin, gold accent Deep pumpkin Dark olive, light pumpkin trim Olive trim, deep olive accent	Trim color or Deep green Brown Black
Shingle Style 1880-1910	Brown stain Gray stain	Cream white Gray white	Bronze green Green shutters
Colonial Revival 1880-1910	Tan, buff or straw Yellow Golden yellow White or Cream Warm gray Pale blue Moss green	White trim White trim, green shutters Medium brownstone White trim Ivory trim	Trim color or Green Brown Blue Rust

Paint Colors

In thinking about painting a building it is important to remember that you are making not just one color decision, but many. Besides choosing the main or “body” color, you will want to decide if the trim should be a different color or different shade of the same color, i.e. light tan and darker tan; should there be a third color for accent; will the window sash be painted white, black, buff or perhaps, as was frequent in the Queen Anne period, a dull red; should the shutters, if any, match the trim? History offers some help with these questions because paint color was an important element of historic styles as they changed over time.

In the Colonial Period, most people tended to be land rich and cash poor, so, as paint was expensive, it was common to leave buildings unpainted or paint them red, the cheapest color. The palette available in this period was limited, mainly browns, grays and neutral yellows, with an occasional white. Trim was usually the same as the body. In the Federal Period white paint became cheaper and, perhaps as a consequence, more popular. But besides white, light colors were often chosen, with a trim of little or no contrast. By the Greek Revival Period, white, the color Americans associated with Greek temples, became nearly ubiquitous: trim too was white, sash was often black. When colors were used they were buff, grays and pale yellows.

From the mid-nineteenth century, architects and builders of the Italianate and other Romantic Revival styles rejected white as being artificial and bland. Since the Italianate style was based on the notion of replicating in America the country villas and city palaces of Italy, they needed to make their

buildings look as if they were constructed of stone. Native New England wood was cheap and easy to work, so it was simply painted to look like stone. Trim was expected to contrast highly with the body and the appliqué work was frequently picked out in a different color to make it stand out.

The Gothic Revival Style was intended to evoke natural landscapes, with buildings intimately related, rather than contrasting to it. Earth and stone tones were admired; green, other organic colors, and sometimes white were selected for trim.

The Queen Anne style was concerned with drama, variety and richness, and this applied to texture and color as well as to massing. More trim colors were used, so that a building might have one body color, a main and possibly two minor trim or accent colors, and window sash of yet another color. Colors tended to be dramatic but dark, with drabs, ochre and colors like blue and orange tinted with grays and browns. If you decide to use several colors on a building, remember that a single bright color should be used sparingly for best effect.

During the Colonial Revival style, architects and builders returned to an earlier, idealized period. White was a popular color, but so were pastels associated with the faded house colors of one hundred year old buildings. Trim was frequently cream or white, with green or black shutters. The Shingle Style, which is frequently associated with the Colonial Revival, was again concerned with the natural look of weathered shingles. Whether in shingle or clapboard, buildings were painted or stained earth tones, usually gray or brown, with trim in contrasting tones or, in Colonial Revival examples, in white or green.

With the Neo-Romantic styles (Tudor, Norman) the pendulum swung once again to the organic and stone colors, except when mimicking the white of plaster infill on Tudor buildings. Craftsman and bungalow style buildings adopted the warm browns and grays of shingled structures or the warm tans and ochres of southwestern masonry.

Plants Suitable for Jacob's Ladder Trail Scenic Byway Corridor Use

The vegetation along Jacob's Ladder Trail varies from upland and wet land to cultivated urban environments. Plants are both native and introduced to the region, so the following list is arranged loosely into upland, wetland and urban species. The recommended upland and wetland plants are all native to New England; the plants for the village centers are not native to the area, but were traditionally used for landscaping. Some commonly-used plants, such as Norway Maple, Oriental Bittersweet, and Japanese Barberry, are not included in the list of traditional plants because they often seed themselves into surrounding natural areas and crowd out the native plants. All of the native plants can also be used in a village setting. Please be careful buying native wildflowers; often they are dug from the wild, rather than nursery-propagated, thus destroying natural populations. From the following categories of plants one can choose appropriate trees and shrubs for reestablishing roadside corridor or buffer zones, as well as those plants which are recommended for turnouts, use in commercial landscaping plans and village plantings. Note that any work in or near wetlands will require review by the town Conservation Commission.

Upland Deciduous Trees

<i>Acer pensylvanicum</i>	Striped Maple
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Amelanchier canadensis</i>	Shadblow
<i>Betula alleghaniensis</i>	Yellow Birch
<i>Betula lenta</i>	Black or Sweet Birch
<i>Betula lutea</i>	Yellow Birch
<i>Betula papyrifera</i>	Paper Birch
<i>Betula populifolia</i>	Gray Birch

Carpinus caroliniana

Carya cordiformis
Carya glabra
Carya ovata
Carya tomentosa
Celtis occidentalis
Cornus alternifolia
Cornus florida
Crataegus crusgalli
Crataegus
phaenopyrum
Fagus grandifolia
Fraxinus americana
Fraxinus pennsylvanica
Juglans cinerea
Juglans nigra
Liriodendron tulipifera
Ostrya virginiana
Platanus occidentalis
Populus grandidentata
Populus tremuloides
Prunus americana
Prunus pennsylvanica
Prunus serotina
Prunus virginiana
Quercus alba
Quercus borealis
Quercus coccinea
Quercus macrocarpa
Quercus montana
Quercus palustris
Quercus velutina
Sassafras albidum
Sorbus decora
Tilia americana

American Hornbeam
 or Ironwood
 Bitternut Hickory
 Pignut Hickory
 Shagbark Hickory
 Mockernut Hickory
 Common Hackberry
 Pagoda Dogwood
 Flowering Dogwood
 Cockspur Hawthorn

Washington Hawthorn
 American Beech
 White Ash
 Green Ash
 Butternut
 Black Walnut
 Tuliptree
 Hop Hornbeam
 American Sycamore
 Bigtooth Aspen
 Quaking Aspen
 American Plum
 Pin Cherry
 Black Cherry
 Common Chokecherry
 White Oak
 Northern Red Oak
 Scarlet Oak
 Bur Oak
 Chestnut Oak
 Pin Oak
 Black Oak
 Sassafras
 Showy Mountain Ash
 American Linden or
 Basswood

Upland Evergreen and Coniferous Trees

Abies balsamea
Juniperus virginiana
Ilex opaca
Larix laricina
Picea glauca
Picea mariana
Pinus banksiana
Pinus resinosa
Pinus rigida
Pinus strobus
Pinus sylvestris
Thuja occidentalis
Tsuga canadensis

Balsam Fir
 Eastern Red Cedar
 American Holly
 Eastern Larch
 White Spruce
 Black Spruce
 Jack Pine
 Red Pine
 Pitch Pine
 White Pine
 Scotch Pine
 Eastern Arborvitae
 Canada Hemlock

Upland Deciduous Shrubs

Amelanchier laevis
Aronia arbutifolia
Aronia melanocarpa
Aronia prunifolia
Ceanothus americanus
Comptonia peregrina
Cornus racemosa
Cornus rugosa
Corylus americana

Dirca palustris
Hamamelis virginiana
Hypericum prolificum
Physocarpus
opulifolius
Potentilla fruticosa
Rhododendron
arborescens

Shadblow Serviceberry
 Red Chokeberry
 Black Chokeberry
 Purplefruit Chokeberry
 New Jersey Tea
 Sweetfern
 Gray Dogwood
 Roundleaf Dogwood
 American Filbert or
 Hazelnut
 Atlantic Leatherwood
 Common Witchhazel
 Shrubby St. Johnswort

 Common Ninebark
 Bush Cinquefoil

 Sweet Azalea

<i>Rhododendron nudiflorum</i>	Pinxterbloom Azalea
<i>Rhododendron roseum</i>	Roseshell Azalea
<i>Rhus glabra</i>	Smooth Sumac
<i>Rhus typhina</i>	Staghorn Sumac
<i>Rosa carolina</i>	Carolina Rose
<i>Rosa virginiana</i>	Virginia Rose
<i>Rubus odoratus</i>	Purple-flowering Raspberry
<i>Sambucus pubens</i>	Red Elderberry
<i>Spiraea latifolia</i>	Meadowsweet
<i>Symphoricarpos albus</i>	Common Snowberry
<i>Vaccinium angustifolium</i>	Lowbush Blueberry
<i>Viburnum acerifolium</i>	Mapleleaf Viburnum
<i>Viburnum alnifolium</i>	Hobblebush
<i>Viburnum lentago</i>	Nannyberry
<i>Viburnum trilobum</i>	American Highbush Cranberry

Upland Evergreen Shrubs

<i>Juniperus communis</i>	Common Juniper
<i>Juniperis horizontalis</i>	Creeping Juniper
<i>Kalmia angustifolia</i>	Sheep Laurel
<i>Kalmia latifolia</i>	Mountain Laurel
<i>Rhododendron maximum</i>	Rosebay
	Rhododendron
<i>Taxus canadensis</i>	Canada Yew

Upland Herbaceous Plants, Groundcovers and Vines

<i>Aquilegia canadensis</i>	Wild Columbine
<i>Aralia nudicaulis</i>	Wild Sarsaparilla
<i>Arctostaphylos uva-ursi</i>	Bearberry
<i>Asarum canadense</i>	Wild Ginger
<i>Asclepias tuberosa</i>	Butterflyweed
<i>Aster divaricatus</i>	White Wood Aster
<i>Aster lateriflorus</i>	Calico Aster
<i>Aster novae-angliae</i>	New England Aster
<i>Clematis virginiana</i>	Wild Clematis
<i>Cornus canadensis</i>	Bunchberry
<i>Dentaria diphylla</i>	Toothwort
<i>Dicentra cucullaria</i>	Dutchman's Breeches
<i>Epigaea repens</i>	Trailing Arbutus
<i>Erythronium americanum</i>	Troutlily
<i>Eupatorium rugosum</i>	White Snakeroot
<i>Gaultheria procumbens</i>	Wintergreen
<i>Geranium maculatum</i>	Wild Geranium
<i>Hepatica acutiloba</i>	Sharp-lobed Hepatica
<i>Hepatica americana</i>	Round-lobed Hepatica
<i>Houstonia caerulea</i>	Bluets
<i>Lonicera sempervirens</i>	Trumpet Honeysuckle
<i>Maianthemum canadense</i>	Canada Mayflower
<i>Mitchella repens</i>	Partridgeberry
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Penstemon digitalis</i>	White Beardtongue
<i>Podophyllum peltatum</i>	Mayapple
<i>Sanguinaria canadensis</i>	Bloodroot
<i>Smilacina racemosa</i>	False Solomon's Seal
<i>Solidago graminifolia</i>	Grass-leaved Goldenrod
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod

<i>Thalictrum polygamum</i>	Tall Meadow Rue
<i>Tiarella cordifolia</i>	Foamflower
<i>Trillium erectum</i>	Red Trillium
<i>Trillium undulatum</i>	Painted Trillium
<i>Vitis labrusca</i>	Fox Grape
<i>Zizia aurea</i>	Golden Alexanders

Many other wildflowers, ferns and grasses are native to this area; this list is a sample of some of the showier plants.

Wetland Trees and Shrubs

<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Alnus rugosa</i>	Speckled Alder
<i>Alnus serrulata</i>	Common Alder
<i>Betula nigra</i>	River Birch
<i>Cephalanthus occidentalis</i>	Common Buttonbush
<i>Clethra alnifolia</i>	Summersweet
<i>Cornus amomum</i>	Silky Dogwood
<i>Cornus stolonifera</i>	Red-osier Dogwood
<i>Fraxinus nigra</i>	Black Ash
<i>Fraxinus pennsylvanica</i>	Green Ash
<i>Ilex verticillata</i>	Winterberry
<i>Lindera benzoin</i>	Spicebush
<i>Myrica pensylvanica</i>	Northern Bayberry
<i>Nyssa sylvatica</i>	Black Tupelo
<i>Populus deltoides</i>	Eastern Poplar
<i>Quercus bicolor</i>	Swamp White Oak
<i>Rhododendron viscosum</i>	Swamp Azalea
<i>Salix discolor</i>	Pussy Willow
<i>Salix nigra</i>	Black Willow
<i>Sambucus canadensis</i>	Elderberry
<i>Ulmus americana</i>	American Elm
<i>Vaccinium corymbosum</i>	Highbush Blueberry
<i>Viburnum dentatum</i>	Arrowwood

Wetland Herbaceous Plants and Vines

<i>Anemone canadensis</i>	Canada Anemone
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Caltha palustris</i>	Marsh Marigold
<i>Chelone glabra</i>	Turtlehead
<i>Clematis virginiana</i>	Wild Clematis
<i>Eupatorium maculatum</i>	Spotted Joe-pye-weed
<i>Heracleum maximum</i>	Cow Parsnip
<i>Iris versicolor</i>	Wild Blue Flag
<i>Lilium canadense</i>	Canada Lily
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lysimachia terrestris</i>	Swamp Candles
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Typha latifolia</i>	Common Cattail
<i>Vitis riparia</i>	Riverbank Grape

Many grasses, sedges and rushes are wetland plants. This list is a sample of some of the more obvious wetland wildflowers and vines.

Traditional Trees for Village Centers

<i>Acer pseudoplatanus</i>	Sycamore Maple
<i>Aesculus hippocastanum</i>	Horse Chestnut
<i>Betula pendula</i>	European White Birch
<i>Picea abies</i>	Norway Spruce

Traditional Shrubs for Village Centers

<i>Calycanthus floridus</i>	Carolina Allspice
<i>Chaenomeles speciosa</i>	Flowering Quince
<i>Cotinus coggyria</i>	Smoke Bush
<i>Hibiscus syriacus</i>	Rose of Sharon
<i>Hydrangea arborescens</i>	Smooth Hydrangea
<i>Hydrangea paniculata</i>	Panicked Hydrangea
<i>Kerria japonica</i>	Kerria
<i>Kolkwitzia amabilis</i>	Beautybush
<i>Philadelphus coronarius</i>	Sweet Mockorange
<i>Rhododendron catawbiense</i>	Catawba
	Rhododendron
<i>Rhododendron schlippenbachii</i>	Royal Azalea
<i>Rhododendron hybrids</i>	Rhododendrons and Azaleas
<i>Rosa hybrids</i>	Rose
<i>Spiraea X bumalda</i>	Spiraea hybrids
<i>Spiraea prunifolia</i>	Bridalwreath Spiraea
<i>Syringa X chinensis</i>	Chinese Lilac
<i>Syringa reticulata</i>	Japanese Tree Lilac
<i>Syringa vulgaris</i>	Common Lilac
<i>Weigela florida</i>	Old Fashioned Weigela

Traditional Herbaceous Plants and Vines for Village Centers

<i>Aristolochia durior</i>	Dutchman's Pipe
<i>Clematis X jackmanii</i>	Clematis
<i>Convallaria majalis</i>	Lily of the Valley
<i>Hemerocallis hybrids</i>	Daylily
<i>Hosta hybrids</i>	Hosta

<i>Iris hybrids</i>	Tall Bearded Iris
<i>Pachysandra terminalis</i>	Pachysandra
<i>Paeonia hybrids</i>	Peony

Many other garden perennials are traditional to village centers.

Corridor Management

Long term management of the Jacob's Ladder Trail Scenic Byway began with formation of an advisory committee during Phase I of the Jacob's Ladder Trail Scenic Byway Study. Each town along the corridor was asked to appoint two members to the committee and the Jacob's Ladder Business Association was also asked to send a representative. Membership on the committee was also open to anyone interested in the byway. Ultimately, a core group made up the committee from the towns, business association, the Pioneer Valley Planning Commission, the Berkshire County Regional Planning Commission, and District #1 of the Massachusetts Highway Department. Members brought considerable expertise in local history, forestry, business, highway maintenance and local government to the group. Meetings were held once a month and minutes of each meeting were sent to the town select boards, select boards of adjoining towns, and to organizations and individuals who asked to be kept abreast of the byway activities.

As an advisory group, the committee began corridor management by establishing its interest in taking part in several reviews for work along Route 20. First, from the project's consulting

engineers' reports the group chose appropriate models for guardrails and retaining walls and registered their preferences with District #1 of the Massachusetts Highway Department, which responded positively. Next, the committee was recognized as a participant in the environmental review process for a large commercial development on the trail in Lee; and members also attended public meetings on previously scheduled road work on Route 20 to represent interests of the byway. At the same time, the group advised on future enhancement projects based on their familiarity with the corridor and its resources.

The advisory committee was slated to become a formal, non-profit organization from the onset of the project, and with that objective in mind it drafted articles of incorporation and bylaws to reflect the management objectives for the corridor. The name of the organization as incorporated is *Jacob's Ladder Trail Scenic Byway, Inc.*. The statement of purpose of the corporation is as follows:

Jacob's Ladder Trail is the name for Massachusetts Route 20 through the towns of Russell, Huntington, Chester, Becket and Lee, Massachusetts. The purpose of the Jacob's

Ladder Trail Scenic Byway, Inc. is to promote economic development, historic preservation and tourism on Jacob's Ladder Trail; to enhance its intrinsic resources; protect it from activities that would have a negative impact on those intrinsic resources; to promote the improvement of highway facilities and guide future development in keeping with the character of Jacob's Ladder Trail. To further engage in any other charitable or educational activity permitted.

The advisory committee also provided for the management corporation's functions by inserting in the standard incorporation language the following:

The Corporation may purchase, receive, take by grant, gift, devise, bequest or otherwise, lease, or otherwise acquire, own, hold, sell, transfer, mortgage, hold, improve, employ, use and deal in and with real or personal property, or conservation or preservation restrictions, or any interest therein, wherever situated, in an unlimited amount.

Bylaws for the organization were drafted over several months with the intention of creating an organization which would represent the five towns, yet provide for participation of members who were not official town representatives but who had strong interest in the corridor. It needed to be realistic in size and recognize the competing claims on residents' time for participation in town activities and government; provision was needed for indemnification and a process for dissolution set out as well. The following bylaws were adopted.

ARTICLE I NAME, PURPOSE AND OFFICES

Name. The name of the corporation shall be Jacob's Ladder Trail Scenic Byway, Inc.

Purpose. Jacob's Ladder Trail is the name for Massachusetts Route 20 through the towns of Russell, Huntington, Chester, Becket and Lee, Massachusetts. The purpose of the Jacob's Ladder Trail Scenic Byway, Inc. is to promote economic development, historic preservation and tourism on Jacob's Ladder Trail;

to enhance its intrinsic resources; protect it from activities that would have a negative impact on those intrinsic resources; to promote the improvement of highway facilities and guide future development in keeping with the character of Jacob's Ladder Trail.

Offices. The principal office of the corporation shall initially be located at the place set forth in the Articles of Organization. The directors may establish other offices and places of business, at their discretion.

ARTICLE II MEMBERS, AND MEETINGS OF MEMBERS

Members. The membership composition of the Jacob's Ladder Trail Scenic Byway, Inc. shall be as follows:

a) Community Representatives - Two members from each town which is a member of the JLTSB, Inc. shall be appointed by the Board of Selectmen and shall include a Planning Board nominee and a nominee from the local Historical Commission or local historical society, or a local resident. They will act as a voting member and an alternate member. The voting member shall have one vote which will be exercised by the alternate in the member's absence.

b) The Jacob's Ladder Business Association - Two members from this association shall be appointed as representatives on the JLTSB, Inc. They shall act as a voting member and an alternate member. The voting member shall have one vote which will be exercised by the alternate in the member's absence.

c) Agency Representatives - One voting member and one alternate shall be designated from each of the following

Summary of JLTSB, Inc.

<i>Representing</i>	<i>Number of Appointments</i>	<i>Number of Votes</i>
Towns	10	5
Business Association	2	1
BCRPC and PVPC	4	1

agencies: The Berkshire County Regional Planning Commission (BCRPC); and the Pioneer Valley Planning Commission (PVPC). Each agency representative shall have one half (1/2) of a vote.

d) At-large Members - There may be an unlimited number of at-large members. At-large membership shall be voted by the members of the JLTBSB, Inc. At-large members will not have a vote.

Duration of Membership. Members to the JLTBSB, Inc. shall be appointed for a term of two years.

Powers of the Membership. The business and affairs of the corporation shall be managed by the membership of the corporation.

Resignation of Members. Any member may resign from the Corporation by delivering a written resignation to the President or Secretary of the Corporation.

Meetings of Members. The meetings will be open to all interested parties. The members will meet as necessary throughout the year. The annual meeting of the members of the Corporation shall be held on the second Wednesday in September in each year, if not a legal holiday, and, if

a legal holiday, then on the next succeeding Wednesday not a legal holiday, for the purposes of electing directors, and for the transaction of such other business as may properly come before the meeting. Notice of the annual meeting and any special meeting setting forth the date, time and place of any such meeting shall be mailed to all members not less than seven (7) days prior to the date thereof, such notice, in the case of any special meeting, to contain a description of the business to be transacted. Special meetings of the members may be called by the president or by a majority of the board of directors and shall be so called by the clerk upon written application of three or more members. Notice of all meetings will be mailed or delivered to the town clerk of each member community.

Quorum. Members. At any meeting of the members, five voting representatives shall constitute a quorum for the transaction of business. If less than a quorum is present at the posted time of a meeting, the chair may delay calling the meeting until a quorum is attained. If no quorum is reached within a reasonable time, the meeting may be adjourned to a time certain by vote of the members present, or failing that, adjourned by the chair to be rescheduled.

Votes. Members. Members shall cast their votes in person according to the number of votes assigned above.

ARTICLE III DIRECTORS

Powers - The business and affairs of the corporation shall be overseen by a board of directors who may exercise all the powers of the corporation which are not expressly reserved to the members by law, the Articles of Organization or these By Laws.

Election. - A board of directors shall be elected annually. They shall be of such number, not less than five (5) nor more than nine (9) as shall be fixed by the members at the annual meeting or at a special meeting in lieu of the annual meeting. All directors shall hold office until the next annual meeting of the members or special meeting in its stead and thereafter until their respective successors are chosen and qualified.

Resignation and Removal - Any director may resign by delivering his or her written resignation to the corporation or to the president or clerk and such resig-

nation shall be effective upon receipt or at a later specified date. Any director may be removed from office by the affirmative vote of a majority of the members of the corporation present at any special meeting of the members called for this purpose at which a quorum of the members entitled to vote is present.

Meetings of the Board of Directors.

Meetings of the board of directors may be held at stated intervals or called at any time by the president or by a majority of the board of directors and shall be so called by the clerk upon written application of three or more members. Notices of meetings of the board of directors shall contain a statement of the business to be transacted at such meeting. A quorum of the board of directors should attend the annual meeting of the corporation.

Quorum. Directors. Three members of the board of directors shall constitute a quorum for the transaction of all business at any meeting of the board. Vacancies in the board of directors, whether arising from death, resignation or otherwise, may be filled by the remaining members of the board for the unexpired term or until filled by the members of the

corporation in accordance with Article V.

Votes. Directors. Each director shall have one vote to be cast in person.

Compensation. Directors shall not receive any stated salary for their services as such, but by resolution of the Board a fixed reasonable sum or expenses of attendance, if any, or both, may be allowed for attendance at each regular or special meeting of the board. The board of directors shall have power in its discretion to contract for and to pay to any member of the corporation or board of directors rendering unusual or exceptional services to the corporation special compensation appropriate to the value of such services.

ARTICLE IV OFFICERS OF THE CORPORATION

Officers. The officers of the corporation shall consist of a president, a vice president, a treasurer, secretary and a clerk. All officers shall be members of the corporation.

Election. The president, vice president, treasurer, secretary and clerk shall be

elected annually by the members of the corporation at the annual meeting

Resignation and Removal. Any officer may resign by delivering his or her written resignation to the corporation or to the president or clerk, and such resignation shall be effective upon receipt or at a later specified date. Any officer may be removed from office by the affirmative vote of a majority of the directors present at any special meeting of the directors called for this purpose at which a quorum of the directors entitled to vote is present. The directors may remove any officer with or without cause by a vote of a majority of the directors, provided that an officer may be removed for cause only after reasonable notice and opportunity to be heard by the directors, and said notice shall contain a statement of the causes assigned for such proposed removal.

President. The president shall, subject to the direction and control of the directors, preside when present at all meetings of the members and directors. The president shall have such other powers and duties as are usually incident to this office and as may be vested in him or her by these bylaws or by the directors.

Vice President. The vice president shall preside over meetings in the absence of the president and perform any other of the functions of the president in his or her absence.

Treasurer. The treasurer shall, subject to the direction and control of the directors, have general charge of the financial affairs of the corporation and shall keep full and accurate books of the account. She or he shall have custody of all funds, securities and valuable documents of the corporation, except as the directors may otherwise provide, and shall render a statement of the financial affairs of the corporation at each annual meeting of the members and to the directors and president upon request. He or she shall have such other powers and duties as are usually incident to this office and as may be vested in him or her by these bylaws or by the directors.

Secretary. The secretary shall give notices of meetings of members and directors as are required by these bylaws and shall keep a record of all the meetings of members and directors. She or he shall have such other powers and duties as are usually incident to this office and as may be vested in him or her by these bylaws or by the directors. In the ab-

sence of the secretary from any meeting of members or directors, a temporary secretary designated by the person presiding at the meeting shall perform the duties of the secretary.

Clerk. The clerk is responsible for all legal filings of the corporation, for certifying votes of the corporation and for the care and maintenance of the records of the corporation.

Compensation. The salaries of the officers, if so declared by the board of directors in accordance with Massachusetts regulations and rules of the Internal Revenue Service, the Articles of Incorporation, and these By-laws, shall be fixed from time to time by the board of directors and no officer shall be prevented from receiving such salary by reason of the fact that he or she is also a director of the corporation.

ARTICLE V INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Indemnification. The corporation shall indemnify each director, officer, employee and other agent and each person who formerly served in such capacity and each person who serves or may have served at the request of the corporation as a director, officer, employee, or other agent of another organization in which this corporation has an interest against all expenses and liabilities, including counsel fees, reasonably incurred by or imposed upon him or her in connection with any action, suit or proceeding to which she or he may be made a party, or to which she or he may become involved, by reason of his or her being or having been a director, officer, employee or other agent of the corporation, or, at its request of any such other organization, whether or not he or she is still serving in such capacity at the time of incurring such expenses or liabilities, except in respect to matters as to which he or she shall be finally adjudged in such action, suit or proceeding not to have acted in good faith in the reasonable belief that his or her action was in the best interest of the corporation, or to be liable for gross

negligence or willful malfeasance; provided, that in the event of a settlement of any such action, suit or proceeding, indemnification shall be provided only in connection with such matters covered by the settlement as to which the corporation is advised by written opinion of independent legal counsel that the directors, officer, employee or other agent to be indemnified did not commit a breach of duty owed to the corporation and only if a majority of disinterested directors approves the settlement as being in the best interest of the corporation. Such indemnification may include payment by the corporation of expenses incurred in defending a civil or criminal action or proceeding in advance of the final disposition of such action or proceeding, upon the receipt by the corporation of an undertaking by the person indemnified to repay such payment if he or she shall be adjudicated to be not entitled to indemnification thereunder. The foregoing right of indemnification shall be in addition to and not exclusive of any other rights to which any person indemnified pursuant to this section may be entitled under any agreement or pursuant to any vote of the board of directors or otherwise.

ARTICLE VI

MISCELLANEOUS PROVISIONS

Amendments. These bylaws may be altered, amended, or repealed and new by laws may be adopted by a majority vote of the voting members with two weeks prior notice at any annual or special meeting of the members of the corporation.

Dissolution of the Corporation. The corporation may be dissolved by a two-thirds majority of the members of the corporation entitled to vote.

*Jacob's
Ladder Trail
Overlay
Zoning
District and
Zoning
Bylaw*

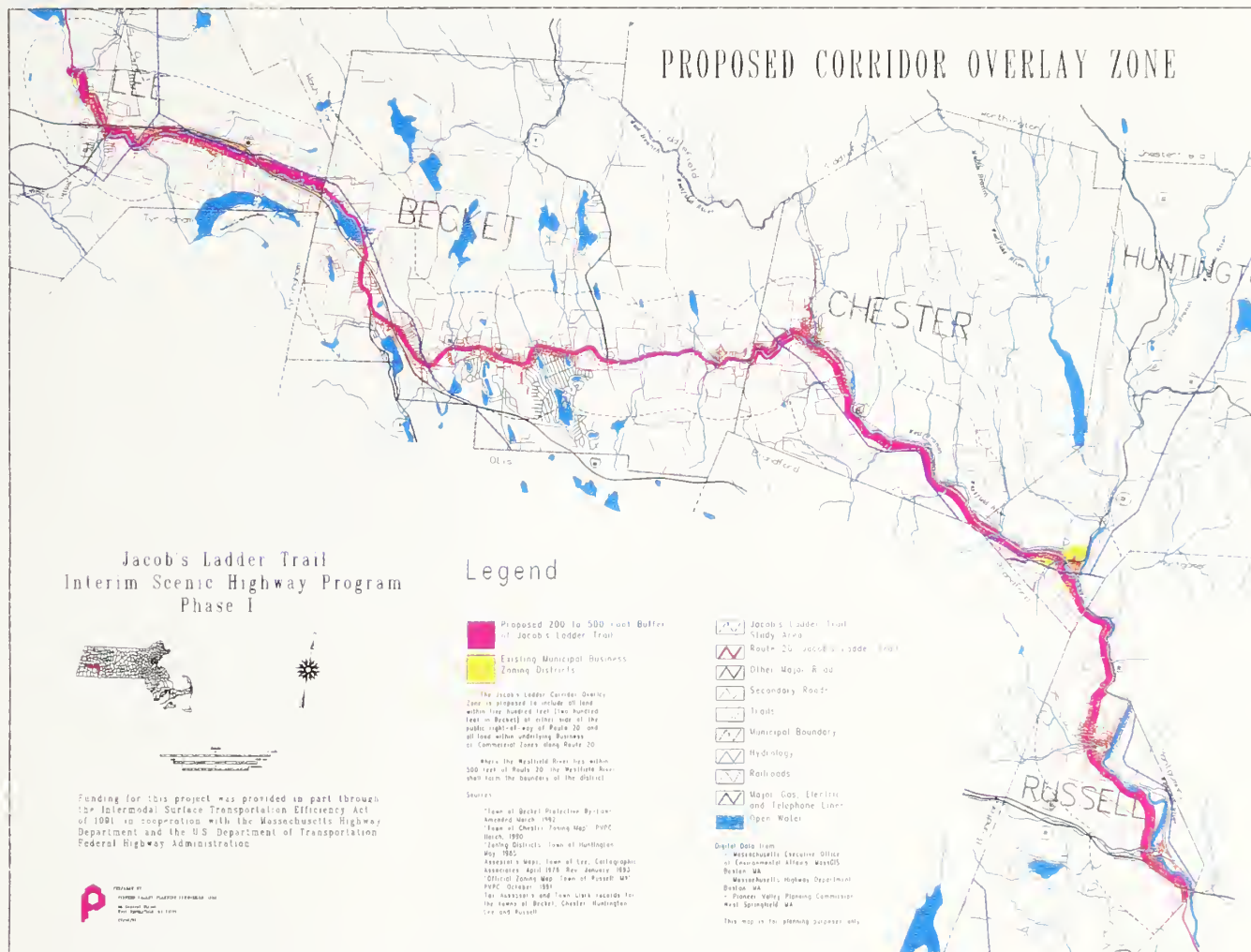
Summary of the Model Bylaw: Jacob's Ladder Trail Overlay Zoning District

The overall goal of the Jacob's Ladder Trail (JLT) model bylaw is to attract economic development to the five Jacob's Ladder Trail communities while preserving their rural character. Adoption of the model bylaw by the JLT communities will create consistent zoning practices in these communities aimed at maintaining the natural beauty and scenic character of the trail.

The overlay zoning district would include lands within 500 feet on either side of Route 20 and all land within the underlying business districts abutting Route 20. In Chester, Huntington and Russell, the Westfield River would constitute the northerly boundary of the overlay district. The regulations contained in the Overlay Zoning Bylaw will supplement the regulations of the existing underlying zoning districts and are designed to encourage harmony and compatibility of developments over the length of the trail.

The model bylaw contains both residential and business performance standards, which would affect new development in two ways:

- 1) All commercial, industrial, multi-family residential, or institutional uses would be required to submit applications for a special permit with design plan review to the planning board of the town where the project is located. During the special permit process, the town planning board will review development plans for compliance with the JLT special permit criteria and recommend appropriate design elements as part of the design plan review process. The design plan review process, unlike the special permit process, will be merely advisory and is intended to give the applicant design suggestions which would reflect the character of the Jacob's Ladder Trail Scenic Bylaw, illustrated in the Jacob's Ladder Trail design guidelines.
- 2) Residential performance standards would apply to new single-family residential uses within the corridor, but outside existing business districts. A twenty-foot wide buffer is required along the Jacob's Ladder Trail, within which alteration of trees and natural vegetation is to be minimized and stone walls and historic features should not be removed.



Process: How to Adopt the Model Bylaw

To encourage communities to adopt land use measures to protect the scenic, historic, and rural character of the Jacob's Ladder Trail, the Pioneer Valley Planning Commission's land use staff took several steps with assistance from the Berkshire County Regional Planning Commission (BCRPC) to promote the concept of a Scenic Byway Overlay Zoning District. These steps included creating a slide show, producing two fact sheets summarizing the proposed bylaw, meeting with the Jacob's Ladder Trail Advisory Committee, and meeting with town officials and boards in each of the five communities. As a result of community meetings, individual overlay zoning district bylaws and maps were developed for each town. The final adoption of town bylaws will be undertaken through a town meeting vote with the assistance of PVPC or BCRPC, whichever is appropriate. Each of these steps is described in the sections that follow.

CREATING A SLIDE SHOW

In the fall of 1994, a slide show was prepared for meetings with town officials and boards. The slide show presented

consistent themes and information to each of the five communities. Photographic slides demonstrating the goals of the scenic byway were taken in the field or were selected from existing Pioneer Valley Planning Commission archives. The photographs showed examples of good and poor development practices in our region and along the trail. The slide show was organized to demonstrate a number of themes including the character of the trail, historic development patterns, and why new land use strategies are required. The major points of the slide show presentation follows.

What is the Jacob's Ladder Trail?

The slide show began with historical background on the origin of the name and the heavy use of the trail by tourists and travelers before the construction of the Massachusetts Turnpike. Several possible explanations for the origin of the Jacob's Ladder name were provided. With the greater travel speed of the Massachusetts Turnpike and the lack of a Turnpike access point along the corridor, tourists and travelers were drawn away from the trail. As a result, the Trail did not experience any major development.

What is the character of the Trail?

In this section, the consistent geographic features of the Jacob's Ladder Trail and historic development patterns were shown. The consistent geographic features included steep hilly topography, the experience of ledge enclosing sections of the road, occasional unimpeded views opening up to the Westfield River and distant views to hills and fields. Development patterns have been guided by historically significant activities like the paper mills in Russell, Becket and Lee, granite and marble quarrying in Chester, Becket and Lee, and small scale farming in all five communities.

Why develop new land use strategies?

The sprawling commercial development that characterizes many highway corridors is not evident along the trail. Chain restaurants, contemporary conveniences stores, and standard roadside gas stations are, for the most part, absent in all but the final section of the trail in Lee. The character of each of the towns is

based on its geography and history, and each is distinct. By adopting new land use strategies, towns can retain what makes them unique, encourage appropriate new development, and eliminate the strip development of new mini-malls and franchises that makes a town into Anywhere, U.S.A.

Most of the trail communities have not experienced the impact of a building boom. Examples of good and poor development practices were shown regarding signs, parking lots, facade renovations, and architecture. Some of the slides showed roadsides overwhelmed by signs, parking lots built right up to the roadway with little vegetative buffering and poor access, and reconstruction of buildings that ignored the local architecture. Other slides showed good examples of signage, parking lot buffers, and local examples of renovation that were harmonious with historical architectural patterns.

About roadside development (retaining trees, natural vegetation, driveways).

The final section of the presentation emphasized retaining natural vegetation, and keeping man-made features such as stone walls, historic buildings, and markers where possible. Good road and driveway standards were also emphasized to prevent accidents and erosion, and to maintain rural character.

DEVELOPMENT OF FACT SHEETS

Two fact sheets were produced to summarize the contents of the Jacob's Ladder Trail Corridor Zoning Overlay District and Design Plan Review Standards. Each fact sheet was designed in a similar format with the Jacob's Ladder Trail logo, a title, goal, and objective. The fact sheets were organized to answer a series of questions. Why do we need a Corridor Zoning Overlay District? What issues does the zoning bylaw address? How does the zoning bylaw work? Why do we need design review? What issues does design review address? How does design review work? The fact sheets were handed out at all initial meetings

with town boards and will be used to promote passage of the bylaw and overlay district at town meetings.

MEETING WITH REGIONAL AND TOWN BOARDS

Once the slide show and fact sheets were completed, meetings were scheduled with the Jacob's Ladder Trail Advisory Committee and the selectboards in each of the five communities. The selectboards were given background information about the project, viewed the slide show, and were asked for their approval to work with other community boards. After approval by the selectboards, a series of meetings were scheduled with planning boards where the model bylaw was presented, reviewed and critiqued. Based on planning board (and in some cases, zoning board of appeals and town counsel review) the model was changed and adapted to fit a community's particular desires and needs.

The boards in the individual communities, at various times, questioned the role of the other communities along the trail. PVPC, therefore, scheduled a meeting at

the Chester Depot in Chester to bring representatives from all the towns to one meeting to discuss the concept and the proposed bylaw.

ADOPTION OF THE BYLAW AT TOWN MEETING

Adoption of the Jacob's Ladder Trail Corridor Overlay Zoning Bylaw in each of the communities will require a two-thirds majority vote at a town meeting. The procedure for taking the bylaw to town meeting is covered in Chapter 40A, Section 5 of the Massachusetts General Laws. The process is explained in several publications including the *LAND USE MANAGER* published by the Massachusetts Executive Office of Communities & Development and *THE PLANNERS HANDBOOK* produced by the Massachusetts Federation of Planning and Appeals Boards. According to the *LAND USE MANAGER*, there are six steps that must be taken before a change to a zoning bylaw is completed. These steps, in simplified form, are as follows:

1. Changing a zoning bylaw begins with filing the proposal with the board of selectmen.
2. Within fourteen days of receipt, the board of selectmen submits the zoning proposal to the planning board for their review.
3. Within sixty-five days of receipt of the proposed changes, the planning board must hold a public hearing.
4. A public hearing notice must be published in a newspaper of general circulation in the municipality once in each of two successive weeks. The first publication cannot be less than fourteen days before the day of the hearing.
5. Following the public hearing, the planning board has twenty-one days to issue a report if they wish to do so.
6. A two-thirds vote of town meeting is required to adopt the proposed zoning bylaw. If the town meeting fails to vote to adopt the zoning proposal within six months after the hearing by the planning board, no action can be taken on that proposal until after a subsequent notice, another public hearing and report by the planning board.

“We Like the Model Bylaw, But ... ” Tailoring the Zoning Bylaw

The adoption of new zoning bylaws by small communities is often a long process. Some communities are more ready than others to adopt portions of the model bylaw. Past experience by Pioneer Valley Planning Commission in assisting communities to adopt land use measures for river protection has shown that a long-term strategy will need to be pursued. The Pioneer Valley Planning Commission and the Berkshire County Planning Commission anticipate that it may take several years before all of the Jacob's Ladder Trail communities have zoning measures in place which adequately protect the character of the trail. As more economic opportunities occur along Jacob's Ladder Trail and more tourists are attracted to the trail, it is more likely that the towns will look more favorably upon adopting and administering the JLTOZ bylaw and will result in increased cooperation between the towns. PVPC's and BCRPC's strategy is to continue to provide technical assistance to the communities until all five towns adopt the JLTOZ bylaw, whether the adoption occurs immediately or five years from now.

The experience of modifying the model bylaw for Becket offers a good example

of what maybe required along a scenic byway to institute a corridor overlay district.

BECKET

The Town of Becket's zoning map is different than all the other communities along the Jacob's Ladder Trail. Becket has a single underlying zoning district and one overlay district (a floodplain overlay). All the other communities have multiple zoning districts, including a business district. Because Becket does not have a designated business district, the town permits a variety of business uses throughout town by the special permit process. These circumstances have led the Becket Planning Board to modify the proposed Jacob's Ladder Trail Scenic Byway Overlay Zoning Bylaw to incorporate its unique elements. Changes to the proposed bylaw are described in the sections that follow.

Areas Subject to the Bylaw

The proposed zoning bylaw model designates the Jacob's Ladder Trail Overlay Zoning (JLTOZ) bylaw as all land “within 500 feet of either side of the edges of the public right-of-way of Route 20, and also all land within the underlying Business or Commer-

cial zones adjacent to Route 20... Where the Westfield River lies within 500 feet of Route 20, the Westfield River shall constitute the northerly boundary of the overlay district.” The Becket planning board felt that three changes were necessary. First, any reference to a business or commercial zone must be removed because Becket does not have any existing Business or Commercial zones. Second, the width of the overlay should be reduced from 500 feet of either side of the edges of the public right-of-way of Route 20 to 200 feet. The planning board felt that 500 feet was excessive for Becket and that most of the business or commercial uses that would have an impact on the Jacob's Ladder Trail would most likely fall within the 200 foot range of either side of Route 20. The third change removes the reference of the Westfield River from the boundary area and substitutes Greenwater Pond instead. The Westfield River is not near Route 20 in the Becket portion of the Jacob's Ladder Trail and in fact is located to the northeast at the Becket/Middlefield town boundary, whereas Greenwater Pond directly abuts Route 20.

Use Regulations

According to the proposed JLTOZ bylaw, all new commercial, industrial, multi-family or institutional uses require a special permit. In Becket, home occupations, an accessory use to single-family uses, are permitted by right. The planning board thought that the proposed zoning regulation could be interpreted to include home occupations as a special permit use. The proposed bylaw was amended to ensure that home occupations would not require a special permit and would remain a by-right use.

Residential Performance Standards

The JLTOZ bylaw establishes mandatory performance standards for all residential uses within the JLTOZ district. Although the planning board understood why these standards are important, they felt that requiring these performance standards for all residential lots would be considered excessive regulation by town meeting. Instead they amended the bylaw to include the performance standards as recommendations instead of requirements and proposed supplementing these

standards by providing a handout to all persons building a home along Jacob's Ladder Trail which describes and illustrates the effective use of the performance standards.

Commercial Performance Standards

The following subsections of the commercial performance standards were amended:

Access and Traffic Standards

Route 20 is a state-designated route in Becket. Whenever anyone wishes to construct a driveway along Route 20 he or she must go to the Massachusetts Highway Department and obtain a curb cut permit. In order to receive a state permit the applicant must meet state driveway construction standards. As a result, the planning board felt that the sight distance standards and the slope standards were a moot item and should be eliminated from the proposed JLTOZ bylaw.

Parking

The proposed JLTOZ bylaw established standards for large parking areas requiring landscaped standards so that no paved parking surface

could extend more than 120 feet in depth. The Planning Board endorsed the idea of parking islands to break up large expanses of asphalt parking lots but thought that the 120 foot standard could be difficult to achieve. Instead they amended the proposed bylaw to require parking islands for large parking areas at intervals of one landscaped island every 15 to 20 parking spaces.

Signs

The proposed JLTOZ bylaw established a maximum sign size of 40 square feet, a maximum sign height of 6 feet, and required signs to be made of natural materials. The Becket planning board felt these standards should be amended to incorporate the existing zoning Bylaw standards. The JLTOZ amendments include a maximum sign size of 16 square feet, a maximum sign height of 16 feet and prohibition against internally lit signs.

Lighting

The planning board felt that the recommended maximum light fixture height of 15 feet was not sufficient and increased the maximum light fixture height to 20 feet.

RUSSELL

In general the planning board and zoning board of appeals members felt that the JLTOZ would have little impact on development review in Russell. The town has had very little development activity in town and gets few requests for special permits. In addition, a very small portion of the area covered by the JLTOZ is currently zoned commercial.

General comments and changes to the model JLTOZ bylaw

After reviewing the proposed bylaw at two meetings, several minor changes were requested by the Planning Board and Zoning Board of Appeals (ZBA). The ZBA will be named as the Special Permit Granting Authority rather than the planning board, since that is their role in the current town zoning bylaw. The boards would also like some guidance on determining fees for review of special permits.

Access and Traffic Standards

The section dealing with sight distance and highway curbs should be removed since all of the section of road located in Russell is governed by Massachusetts Highway Department standards.

Signs

The proposed JLTOZ bylaw established a maximum sign size of 40 square feet, a maximum sign height of 6 feet, and required signs to be made of natural materials. The Russell planning board felt these standards should be amended to incorporate the existing zoning bylaw standards. The JLTOZ bylaw should be amended to include a maximum sign size of 6 square feet, a maximum sign height of 6 feet and a prohibition against internally lit signs.

CHESTER

The Chester planning board had several meetings with the PVPC. The Chester planning board felt that some changes were necessary to the JLTOZ bylaw. The changes affect the following areas.

Residential Performance Standards

The Chester Planning Board felt that requiring a 20-foot vegetated buffer strip for all residential uses may not be appropriate in Chester. Instead of requiring the buffer strip, the plan-

ning board would like to encourage use of the buffer strip.

Commercial Performance Standards

The Board also observed that Chester does not have very much land which is now zoned for commercial use and which is not yet developed. Chester's commercial zoning district is focused on Chester Village. The Village parcels do not have excess land available to accommodate landscaped buffers and parking areas. However, several board members recognized the possibility that some of the commercial lots just outside of the village could eventually be redeveloped. The proposed commercial performance standards may be suitable for those lots. The Board supports the standards pertaining to access and traffic, parking, lighting, and building setbacks. The Boards needs to deliberate further on the remaining commercial performance standards, as well as the design guidelines.

HUNTINGTON

The Huntington planning board is moving slowly and cautiously toward supporting the model overlay zoning bylaw. Officials from Huntington board of appeals and the Huntington planning board have expressed support for the underlying land use and design objectives of the JLTOZ bylaw. However, these officials stated that in the current anti-government political climate in Huntington, the standards and criteria in the JLTOZ bylaw would not be approved by Huntington voters. In light of these political circumstances, these officials believe that the existing zoning bylaw special permit standards are sufficient to achieve the same design objectives which are contained in the model.

specify the number of trees or shrubs required per number of parking spaces. They believe that this standard will result in more greenery than the model standard requiring that 10% of the parking area be landscaped. Another example is that lighting fixtures should be no higher than 10 feet; the model bylaw specifies 15 feet.

The planning board will study the model bylaw further to determine whether to propose it for adoption.

LEE

Lee Planning Board members observed that in several instances, the existing Lee zoning bylaw contains commercial standards which may be either more specific or more stringent than those proposed in the JLTOZ Bylaw. For example, the planning board prefers to

Other Recommended Zoning Strategies for the Corridor

The Jacob's Ladder Trail Overlay Zoning bylaw is an immediate strategy for protecting the scenic and rural character of the Jacob's Ladder Trail communities. Several other zoning strategies, as listed below, were recommended to the towns for study and possible adoption over the next several years. These zoning bylaws also are designed to preserve the character of the towns, but are intended to be applied throughout the towns, not just along the corridor. Several towns have already adopted some of these bylaws; no town has adopted all of them. Each of these recommended bylaws needs to be studied carefully in light of the particular characteristics of an individual town. As each town adopts its version of the bylaw, Pioneer Valley Planning Commission and Berkshire County Regional Planning Commission hope that these communities will re-evaluate their zoning bylaw and incorporate some of these innovative land use strategies as additional means to encourage thoughtful, creative development.

CREATIVE DEVELOPMENT ZONING BYLAW

A creative development zoning bylaw will help preserve rural character and visual appearance. This option will offer an alternative to standard "Approval-Not-Required" ("ANR") roadside lot development. The creative development zoning bylaw offers common driveways and flexible lot areas as options which can be used to create permanent open space, to protect farmland, forest land, natural, historic and archaeological resources, wildlife habitat, and scenic views. In a conventional single family development, two to six residences could be constructed along a single common driveway. Creative developments will be allowed by special permit from the planning board of the town where the project is located.

COMMON DRIVEWAY ZONING BYLAW

A common driveway zoning bylaw will help preserve rural character and visual appearance. The bylaw allows land owners to apply to the planning board

for a special permit to construct a single driveway to serve two adjacent lots along an existing road. Common driveways will reduce the number of curb cuts and traffic entry points along roadways. The common driveways option will increase traffic safety, encourage developers to retain more of the native vegetation, and preserve rural character by minimizing the degree to which the landscape appears to be cut up into separate single family lots.

SIGN BYLAW

A sign bylaw can prevent uncontrolled signage lining Jacob's Ladder Trail, which can rapidly degrade a town's character, and in worst cases, cause traffic safety hazards. The sign bylaw establishes standards for the size, height, placement, illumination, and materials of all types of signs. Certain types of signs, such as billboards or flashing signs, are prohibited.

PARKING STANDARDS BYLAW

A parking bylaw establishes uniform standards for off-street parking and loading. It establishes the number of parking spaces required for each type of land use. It can prevent unsightly parking lots from degrading a community's character by establishing minimum standards for landscaping, screening and lighting, and by encouraging shared parking or parking to the side or rear of businesses.

ROAD STANDARDS FOR PUBLIC WAYS, PRIVATE DRIVES AND SUBDIVISION ROADS

Subdivision regulations and road standards should facilitate road designs which reflect the rural character of the area, and emphasize the environmental protection criteria contained in the commercial performance standards of the Jacob's Ladder Trail Overlay Zoning District.

These standards include:

- stormwater runoff and erosion control standards for road construction;
- requirements for roadside and driveway access landscaping which reflect the rural character of the area; and
- allowances for variable road and driveway widths to allow new developments to maximize retention of native vegetation while insuring safe access for emergency vehicles.

MAJOR RESIDENTIAL DEVELOPMENT BYLAW

A major residential development zoning bylaw establishes more stringent standards for large-scale residential developments that have the potential for significant impact on the town's rural character and important natural resources, such as prime farmlands and woodlands. The bylaw uses a special permit process to ensure that large-scale developments meet performance standards established to protect prime farmlands and woodlands. The bylaw would apply to residential developments larger than ten acres or ten lots, which require approval under the Massachusetts Subdivision Control Law, and which are proposed

within identified special resource areas such as farmlands or woodlands.

Applicants for special permits to undertake major residential developments in these resource areas would submit two concept development plans: a standard development plan and a cluster or "creative development" plan. The local planning board would select the most appropriate development plan for the site. Performance standards would require that, where feasible, residential development be clustered on the site's least productive soils, while preserving prime farmlands or woodlands permanently as open space.

SCENIC UPLAND BYLAW

A scenic upland bylaw will protect the scenic and environmental quality of ridgelines and hillsides which are highly visible from the Jacob's Ladder Trail. The bylaw discourages new residential development on hillsides, ridgelines and steep slopes, and cutting of vegetation and mature trees which significantly detracts from the natural scenic quality of these resource areas. The guidelines will also require public utilities to submit

plans which demonstrate that proposed construction minimizes the impact on the scenic qualities of hillside and ridgeline resource areas.

SCENIC ROADS AND SHADE TREE BYLAW

A scenic roads bylaw will help preserve rural character and visual appearance by requiring that significant alterations to certain public ways and public shade trees be reviewed and approved by the town planning board. This bylaw will allow residents, town officials and Jacob's Ladder Trail Scenic Byway, Inc. to nominate roads for designation as scenic roads. The town planning board will review nominations and refer them to town meeting for approval. Scenic roads and public shade trees would be designated by a majority vote at town meeting. Approval would be required for any proposed work within the boundaries of the public right of way of designated scenic roads. Work requiring approval includes tree cutting or removal, removal or destruction of stone walls, road work, and utility work.

